



## Contactless Measuring Technology

*New generation of optical sensors for distance and thickness measurements for the [Glass Container Industry](#)*

Optical sensors for measuring distance and layer thickness down to 10nm resolution and it combines two different ways of doing this in the one system.

[Chromatic sensor](#) uses the chromatic length aberration to measure distance and thickness (independent of surface texture and colour).

[White light interferometer](#) to measure transparent polymer film thickness between 2 and 250 microns optical thickness of single and multiple layers, ie, functional coatings, varnish, adhesive foil, etc.

A high resolution [3D contactless measuring unit \(portable\)](#) for surface topography, profiles, layer thicknesses, contours, etc. A precision stage with linear drives mounted on granite base assures precision operation in Quality Control, laboratories and in industrial production.

A [range of sensor heads](#) enables measurement of different surface structures from a few microns to several mm with submicron resolution.

[Software](#) provides data acquisition, measurement control, and extensive analysis of topography, profiles data using different filters, fit functions, roughness calculation and volumina distance histograms with various views.

### [Applications](#)

- Production and process control – sandwich structures
- Quality assurance – bottles, flat glass, sunglasses, windscreens,
- R&D – Process Engineering
- Automotive
- Semiconductor
- Electronic
- Optical
- Medical Devices

## Non-Contact measurements of material thickness in Glass Production

- Wall thickness measurement of *premium quality flint glass containers* with the white light interferometric sensor
- Measuring the topography of *engravings and textures* using the NEMESIS and CHRocodile sensors
- Thickness measurements of innovative *round, non-round, slanted and angled glass bottles*
- Thickness measurements of a transparent coating, i.e. *polymer coatings*
- Thickness measurements of *pharmaceutical and cosmetic glass containers*

*For further information on this and other LaserAge products, please contact;*

Dr. Leo Sexton, MD

*LaserAge Ltd.*

*LaserAge House*

101 Lissadell,

Maryborough Hill

Douglas, Co. Cork, Ireland

Tel: 00 353 87 608 0919 (M)

Tel/Fax: 00 353 21 4899 723

[leo.sexton@laserage.ie](mailto:leo.sexton@laserage.ie)

[www.laserage.ie](http://www.laserage.ie)

LaserAge is a leading R&D provider of Precision laser-based Manufacturing Solutions for the aerospace, medical, automotive and semiconductor industries.

We provide performance specification & selection of industrial laser systems. Our experience in Laser Material Processing (LMP) covers: *Laser Ablation* (cleaning, marking, decoating & decontamination), *Hole Drilling, Rapid Prototyping* (in tool steel), *Laser Micro Joining* (welding) and *Polymer Welding* (for plastics). For macro processing systems we focus on *Laser Hardening & Cladding* for Wear & Corrosion Protection, especially applicable to the Wear Parts Industry.