

Press Release

Non-contact wafer and chip measurement now even simpler

The new CHRocodile IT measuring system registers the silicon thickness with just one sensor

The new CHRocodile IT from Precitec Optronik now offers very simple, and at the same time, highly accurate layer thickness measurement for wafers and chips. It is capable of non-contact silicon scanning with just one measuring point and can measure a wafer precisely to a thickness of 1 mm.

The background to this new, non-destructive measuring process is a sensor that works with interferometry, using infrared light and not, as is usual, white light.

Advantage: One measuring point with very bright light allows measuring speeds up to five times faster under the same conditions, and a measuring range that is ten times greater (up to 3.5 mm air gap) compared with the white light method. This allows the measuring unit to be integrated directly into the wafer production process thanks to its robust and simple configuration. Of course, CHRocodile IT is also ideal for economical, and at the same time, highly accurate layer thickness measurement in the laboratory.

Here, the new system not only records silicon layer thickness with high precision, it also does the same with transparent films to a thickness of 2.5 mm.

The recorded measured values are available to the user for process monitoring and control, or for documenting in Excel.



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CHRocodile IT therefore offers significant advantages for wafer and film manufacture:

- Ø Highly accurate thickness measurement from just one side
- Ø A non-contact and non-destructive measuring process
- Ø A light source 5 times brighter, making measuring 5 times faster
- Ø A 10 times greater measuring range (up to 3.5 mm) than with the white light method
- Ø It can be easily integrated into the production process
- Ø It is small, compact and economical

For the user, this means:

- Ø Maintaining high quality standards in wafer and film production
- Ø Avoiding reject production
- Ø Rapid amortisation of the equipment investment