

Press Release

Increasing quality and economy in bottle production

Contact-free measurement of bottle thickness and roundness with the new CHRocodile M4

The new thickness measurement system CHRocodile M4 from Precitec Optronik now provides a particularly economical solution for inline inspections during the production of bottles and container glass.

The system from the successful CHRocodile range of sensors directly records the thickness and roundness of the glass body without contact and with high precision during the ongoing production process. This means that it is not necessary to take and measure samples during the production process, so as to readjust the system if necessary following the production of a large number of rejects.

So that very minor flaws can still be detected even at fast belt speeds of (for example) 4m/s, CHRocodile M4 works with a high measuring rate of 4000 measurements per second. It does not matter whether transparent glass bottles or coloured glass vessels are passing along the production line.

The temperature of the still glowing glass or manifestations of streakiness caused by the hot surrounding air have no influence on the measuring accuracy.

The new system is of a modular design and utilises the optical measuring process of chromatic wall thickness measurement in the special Precitec Optronik configuration, which is unsurpassed in terms of robustness. Up to 4 independent measuring points also record the glass thickness between (optionally) 2 µm and 35 mm, as well as the product's stipulated degree of roundness. It does not matter whether smooth or engraved glass is involved, for example Coca-Cola bottles.





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CHRocodile M4 can be integrated into existing systems with particular ease, because it can be completely configured via RS 232 and RS422 interfaces. The data for the process monitoring of the production system is output digitally via these interfaces.

The system's sensors are already calibrated and are designed for years of maintenance-free operation.

To summarise, the new contact-free thickness measuring system offers major advantages in bottle glass production:

- Ø Inline monitoring of glass thickness and roundness
- Ø Measurement of white and coloured glasses
- Ø Ensures product quality via 4000 measurements per second
- Ø Reliable measurement data even from glowing glass
- Ø Simple adaptation thanks to the modular design of the up to 4 measuring heads
- Ø Can be easily integrated into the production process (plug & play)
- Ø It is small, compact and economical

In concrete terms, this means for the user:

- Ø Higher bottle quality
- Ø Avoiding reject bottle production
- Ø Far greater economy