

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS



POLKA -**100% INLINE STRESS INSPECTION OF CONTAINER GLASS**

Undetected mechanical stress in Your benefits at a glance glass products not only leads to increased rejects and lower product quality. In extreme cases it can also present a safety risk, not to mention the additional costs that arise.

Thanks to our polarization camera POLKA, that won't happen to you

The camera's novel CMOS sensor lets you determine the severity and precise position of potential residual stress at a glance and directly sort out defective products.

POLKA makes time-consuming, costly inspection processes a thing of the past.

The results of the cycle-precise monitoring of the production line with POLKA can be transmitted to a standard PC and analyzed using a GigE Vision or USB3 Vision interface.

- 100% inline residual stress inspection and easy integration into existing inspection systems
- _ Up to 2,000 glass container inspections per minute
- Around-the-clock, non-stop quality control, 365 days a year
- Broad utility thanks to POLKA's compact, robust design
- Lower production costs through a streamlined inspection process
- 100% utilization of the machinery
- Compatible with standard industrial image processing equipment

Polarization camera – POLKA

- Robust, industrial-scale camera system
- Single-shot images of the polarization _ information make it possible to record

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moving objects

- Intuitive operation
- C-mount lens connector

Technical data of our current prototype

Optical

- Resolution: 640 x 480 pixels
- Frame rate: up to 25 fps
- Sensor format: 3.8 x 2.9 mm
- Pixel size: 6 μm

Electrical

- GigE Vision or USB3 Vision interface
- Control signals: Sync, Trigger, Strobe
- Power supply: 5 volts, 3,5 watts

Mechanical

- Lens adapter: standard C-Mount
- Size: 55 x 55 x 65 mm
- Weight: 290 g

POLKA – open to your application

Do you have a concrete application for POLKA that requires other interfaces or applicationspecific software?

We can modify the hardware design in accordance with your needs and enhance the software with proprietary image processing and analysis algorithms.

Are you interested in renting the POLKA system for test purposes over a specific period of time?

We would be happy to provide you with a quote.

Call today and discover the benefits of POLKA for yourself!