



**VITRONIC**  
the machine vision people



VINSPEC HEALTHCARE

## FOR PHARMACEUTICAL VIALS

### **Multiple Inspections – One Result: Quality**

VINSPEC HEALTHCARE from VITRONIC offers an integrated solution for automated quality inspection of vials. The optical inspection system covers all inspection requirements throughout the entire packaging process. These include the inspection of empty glass vials, as well as inspections during the filling and sealing process. Using inline inspection, the systems detect minuscule defects prior to filling and ensure that defective products are excluded from further processing – for patient safety. [www.vitronic.com](http://www.vitronic.com)



## Safe and Efficient Production

Glass vials are among the most frequently used primary packaging materials in the pharmaceutical industry. Numerous inspection tasks are required during the filling and sealing of glass vials. That's because a 100% quality inspection is the most important prerequisite for maximum product safety.

It is essential to ensuring that high-quality pharmaceutical ingredients are protected from contamination, e.g. by minuscule particles in the containers or from becoming non-sterile due to defective vial caps. Such defects could potentially have a negative impact on the safety of patient care. Using inline inspection, the systems detect possible defects in the individual process step directly, ensuring that any faulty vials are excluded from further processing.

## Optimized Systems for All Inspection Requirements

VINSPEC HEALTHCARE inspection systems cover all inspection tasks relating to the filling and sealing of vials. These include quality inspection of empty vials to detect particles or defects, inspection of the stopper to ensure correct positioning, and inspection of crimped vials and crimp depth inspection. In addition, the crimping quality inspection system inspects the quality of the crimping and cap, and detects defects in the cap skirt, as well as its color and shape.

Furthermore, reading and identification of 1S/2D codes and reading of text on the cap top and its jacket area via Optical Character Recognition (OCR) complete the broad inspection range. All systems can be easily integrated into your existing line concepts.

## Standard Performance Data at a Glance\*

<b>Inspection concept</b>	Inline directly after the process step
<b>Scope of inspection</b>	Modular assembly based on customer requirements
<b>Vial formats</b>	Virtually all vial formats with a maximum cap diameter of 36 mm (special sizes on request)
<b>Inspection speed</b>	Up to 600 objects per minute, only 0.1 seconds per object inspected

\* We also offer customized solutions to meet any additional requirements.



### DETECTION OF PRODUCT MIX-UPS BASED ON

- » Cap color
- » Cap shape



### READING + VERIFYING

- » 1D-codes
- » 2D-codes
- » OCR
- » OCV



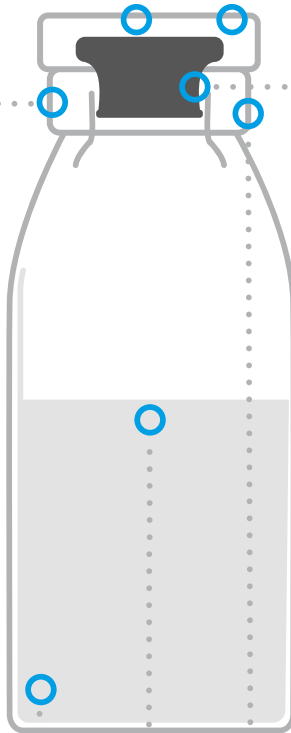
### QUALITY INSPECTION OF THE CAP AND CRIMP FOR

- » Deformations, defects and cracks in the seal surface
- » Wrinkled crimp
- » Partially or entirely missing crimps
- » Deformed and destroyed crimps



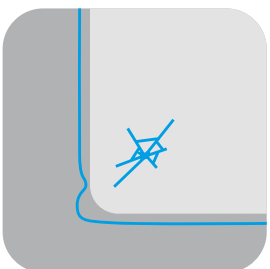
### STOPPER INSPECTION

- » Correct position of stopper
- » Correct color of stopper
- » Quality of stopper



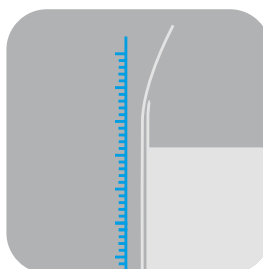
### SEALING CAP INSPECTION

- » Correct seat by means of crimp depth measurement

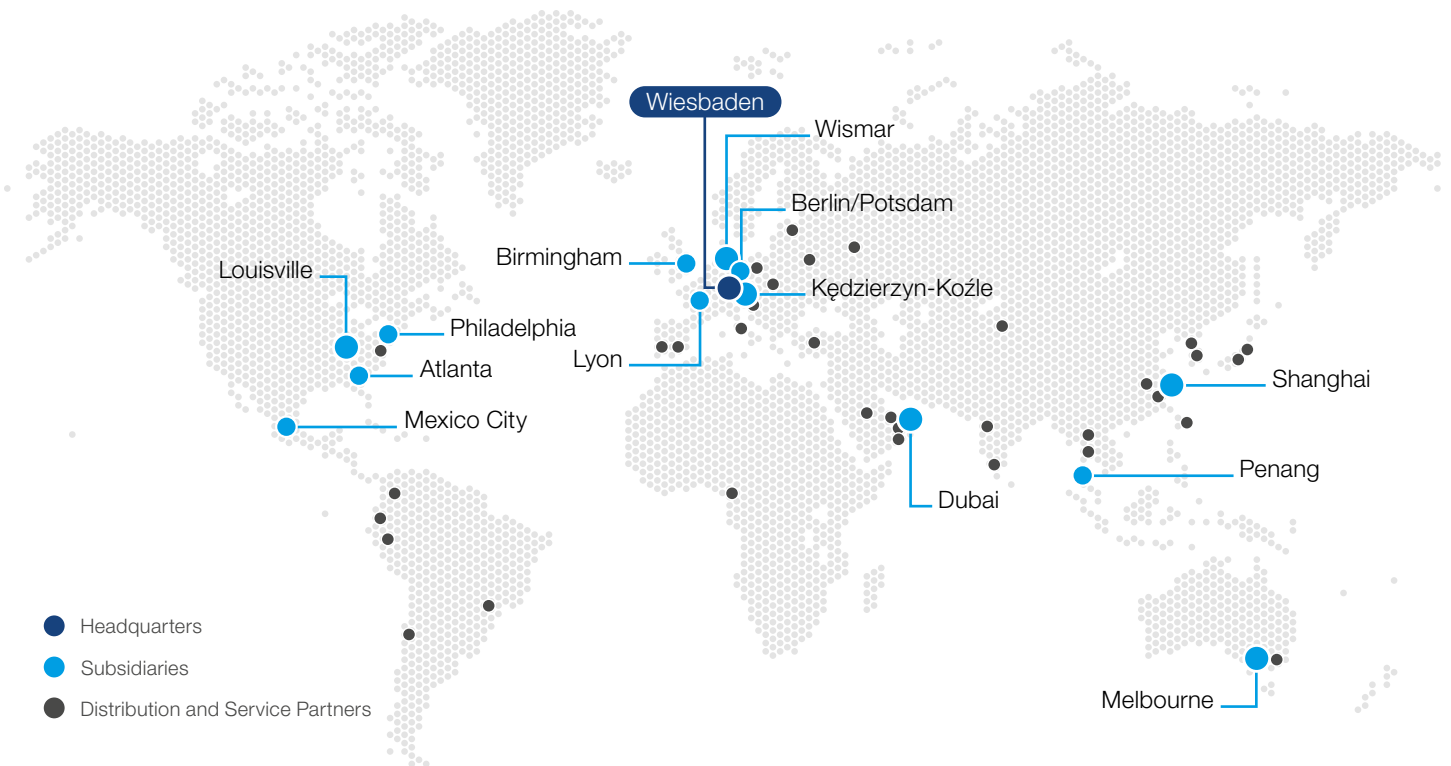


### QUALITY INSPECTION OF THE CONTAINER, AMONG OTHER THINGS, FOR

- » Particles
- » Contamination
- » Cracks
- » Deformations
- » Defects on the vial body



### INSPECTION OF FILLING LEVEL



# VITRONIC WORLDWIDE

VITRONIC is a global leader in the field of industrial machine vision headquartered in Wiesbaden, Germany. Since its foundation in 1984, the privately owned company has been offering highly innovative solutions in industrial automation, logistics automation and traffic technology. Today, VITRONIC supports customers in over 60 countries via a global network of subsidiaries, service centers and partner companies.

All of the companies' products are developed, designed and manufactured by VITRONIC in Germany. They range from standardized to fully customized solutions.

Feel free to contact us – we look forward to hearing about your projects.

**Full contact details and further information are available at [www.vitronic.com](http://www.vitronic.com)**

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