

# I<sup>2</sup>VS

Induction Integrity Verification System

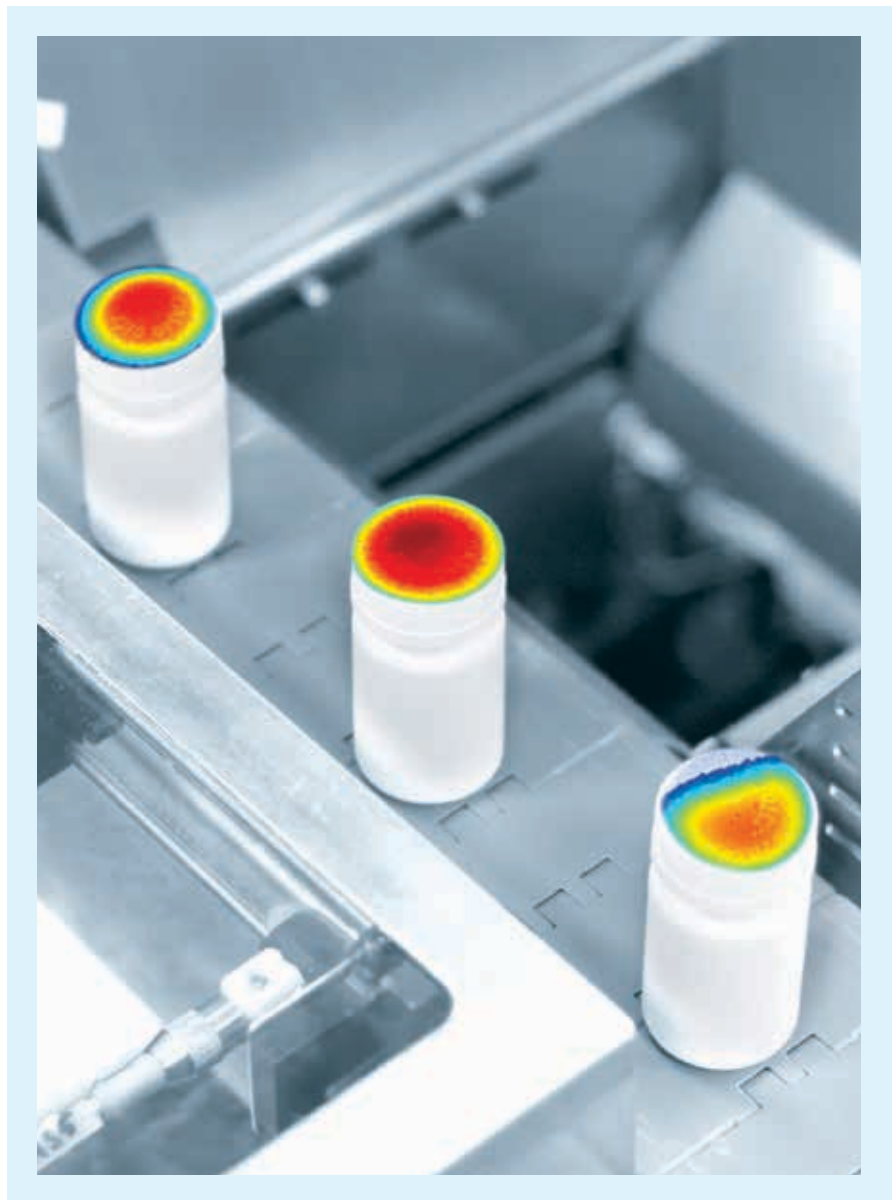


IMAGE IT

**DIR** Technologies



The **Induction Integrity Verification system** (I<sup>2</sup>VS) is inspecting the quality the induction sealing of bottles and jars at real time, facilitating process control and continued process verification (stage 3 of FDA 2011 process validation guidance).

The integrity of the seal is verified by means of thermal imaging and propriety image processing algorithms.

Following the detection and the identification, the defective bottles are removed from the production line.

Moreover, the I<sup>2</sup>VS can monitor the induction process itself, and verify that the process works constantly within the Validated process window



The I<sup>2</sup>VS will identify and remove bottles suffering from the most common induction problems, such as the examples below



Bent Foil



Missing Foil



Underheating (cold soldering)



Overheating



Crooked Cap



Lay down or upside down bottle

## SYSTEM MAIN CHARACTERISTICS

- Inspection is done with the cap on, and without interfering with the product or the process
- The system can measure most bottle and cap sizes and types
- Transition between bottle types is done by simply choosing the right bottle on the menu on the touch screen
- The system can detect all major failure modes
- All external parts of the system are made of Stainless Steel or Anodized Aluminum
- Every bottle seal picture is recorded providing 100% traceability
- The system generates batch reports with all system and rejection activities
- A Red-Green warning light provides system status (working/halt)
- Simple GUI menus and touch screen interface
- Easy to integrate in existing lines
- Left-to-right or right-to-left conveyor direction compatibility
- Optional 21-CFR-11 compliance





## About (DIR)

DIR Technologies utilizes sophisticated **infra-red detectors** and **thermal imaging** technology combined with **high throughput imaging & analysis** software, to provide innovative solutions for the **quality control and process monitoring** of pharmaceutical manufacturing and packaging processes



### Advantages of DIR's technology

- Nondestructive, noninterfering
- In-line, Real-Time, 100% testing
- Very small foot-print, adaptable to any existing production line
- Can be customized to a wide variety of packaging processes
- No slowdown of production

#### Contact us for additional Information

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