

Thermographic solutions for the pharmaceutical industry

Make a change



# Induction Integrity Verification System

#### What is it?

DIR's I<sup>2</sup>VS is the first in industry 100% in-line inspection system for induction sealed bottles and jars that is non-intrusive and does not result in production slowdown.

A quantum leap from sampling to monitoring every single package - the system goes a step further to provide process control by indicating not only if an issue occurs, but what caused it, giving the opportunity to amend in real time.



### How does it work?

The I<sup>2</sup>VS combines high end thermal imaging normally used in the defense industry with sophisticated analysis algorithms and proprietary IP to provide real time integrity monitoring of every single bottle on the packaging line – at the speed of the machine throughput.

Inspection is "hands off", non-invasive and non-destructive. Nothing is projected at the product; the I²VS reads and analyzes the inherent heat signature of the cap's liner (which is amplified directly after induction).

The I<sup>2</sup>VS is compatible with most bottle and caps sizes and types and can be easily integrated in to almost any packaging line.

Inse industry with

Bottle scanned by I<sup>2</sup>VS

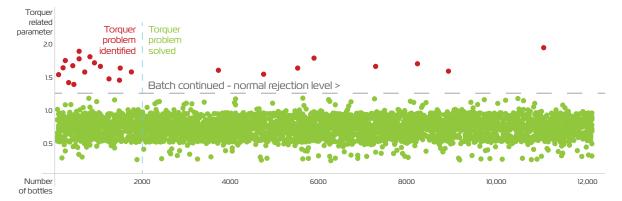


#### Why do I need I²VS?

- Ultimate quality assurance of primary packaging induction sealing 100% inspection
- Unprecedented process control Discover and fix potential problems in real time
- Fast No slow-down of the packaging line
- Tamper evidence integrity verification
- Detects when the cap is not fully closed, indicating that the child resistant mechanism will not be effective
- Reduce customer complaints
- Designed for simplicity Sophisticated technology engineered to minimize human error, easy GUI, simple user interface
- Non-interfering, non-degrading inspection integrity analysis is done through the cap
- > ROI Cuts costs inherent in sampling methods, minimizes waste (time, work-backs, materials and labor)
- Reports enable statistical process control of the induction sealing process over time
- Brand integrity Assurance that brand standards are upheld on the packaging line

#### Trend analysis example

Bottles rejected (red), problem analyzed, torquer fixed and rejections returned to acceptable levels



#### See if I²VS is right for you in 3 easy steps



Discuss your needs and goals with the I²VS Product Manager.



Send samples of your product for feasibility testing at DIR HQ.

Prove

Should you feel the need, for a modest fee, DIR will arrange a trial on your packaging line, enabling you and your team to witness the capabilities and benefits of I<sup>2</sup>VS. This is simple to set up and requires minimal changes or slowdown of packaging lines.

Contact DIR Headquarters info@dir-technologies.com



## Because sampling isn't enough.



STIFED CAS

**DIR Technologies** is the developer and provider of first-in-industry thermography based inspection solutions for pharmaceutical primary packaging quality assurance and process control.

**DIR solutions** offer a quantum leap from commonly used methods of sampling by providing 100% in-line, non-intrusive inspection that does not result in production slowdown.



MATAM Industrial Park, Matam Towers 3, 6F, Haifa 3190501, Israel info@dir-technologies.com \\ +972 (4) 8501190 \\ www.dir-technologies.com