Make a change

I²VS

Induction Integrity Verification System

DIR Technologies
Thermographic solutions for the pharmaceutical industry
DIR's I²VS 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.

I²VS detects through the closed cap

Underheating (cold soldering)   Damaged lip   Crooked or loose cap   Bent or misaligned foil

Missing foil   Overheated (burnt cap)   Untorqued cap

How does it work?

The I²VS 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 I²VS is compatible with most bottle and caps sizes and types and can be easily integrated in to almost any packaging line.
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

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See if I²VS is right for you in 3 easy steps

**Consult**
Discuss your needs and goals with the I²VS Product Manager.

**Test**
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 I²VS. This is simple to set up and requires minimal changes or slowdown of packaging lines.

Contact DIR Headquarters
info@dir-technologies.com
100% in-line inspection

Because sampling isn’t enough.

**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.