# Jones Packaging adds smarts to pharma packaging **A Smart Packaging Use Case**

## **intelliPACK BUSINESS NETWORK**









Copyright © intelliFLEX Innovation Alliance, intelliPACK and the Packaging Consortium, PAC With today's wireless and consumer technologies, packaging can be much more than just a product enclosure.

The Age of Intelligent Packaging has arrived and Canada's Jones Packaging is among its evangelists. This company has come a long way from its roots in the 1880s. But so too has the humble box, bottle and blisterpack.

Jones, a founding member of the CPEIA, is a rare enterprise in the packaging industry. It has taken a proactive approach to position itself for the future by creating its own in-house technology team. This team has pursued partnerships with technology developers that can help it create, integrate and commercialize intelligent packaging solutions using printable electronics that can be produced on its high-speed production lines.

Jones first partnered with T+Sun (a joint initiative of Sun Chemical and T+ink) on Touchcode<sup>™</sup> touchscreen sensitive coding. This invisible printed code can activate any touchscreen with web apps or dedicated applications for product authentication. This gives brand owners in markets such as pharmaceuticals a powerful tool in the war against counterfeit goods.

Jones continues to tackle the evolving needs of the pharmaceutical industry. The need to more effectively authenticate and trace medications as they move through the supply chain to consumers is becoming a regulatory imperative. This heightened emphasis in traceability and security is being driven in the EU by the Falsified Medicines Directive and in the U.S. by the Drug Supply Chain Security Act (DSCSA).

#### A new level of trust and engagement

In early 2016, Jones partnered with Scandinavia's Thin Film Electronics ASA, a global leader in printed electronics and smart systems.

Why? To integrate Thinfilm's NFC OpenSense<sup>™</sup> technology into paperboard pharma packaging and establish the key manufacturing processes required for output on a high-speed production line.

Jones and Thinfilm are engaging with leading global pharmaceutical companies to integrate this smart technology into Rx and over-the-counter product packaging and bring this solution to market.



NFC OpenSense tags are thin and flexible printed

electronics labels. They can detect both a product's "factory sealed" and "opened" states and wirelessly communicate contextual content with the tap of an NFC-enabled smartphone.

The idea is to take a physical package and connect it to a virtual world of information. Brand owners can deliver a new level of security and confidence in their products to consumers. Consumers can quickly determine if a given product is the right one for them by accessing additional content with their mobile devices.



#### **Empowering consumers**

"In addition to ensuring the security of the medication, a tap of a smartphone can also deliver information on dosage, side-effects and expiry date," said James Lee, Jones' Director, Technology and Innovation. "Unlike the leaflets now included in drug packaging, the information can be kept updated in real time. Instead of squinting at fine print, wouldn't it be better to have a video of a doctor pop up and warn you not to take that medication with grapefruit juice?"

Each OpenSense tag contains a unique identifier that makes it possible for pharmaceutical companies to authenticate products and track them to the individual-item level using powerful software and analytics tools. In addition, the tags remain active even after a product's factory seal has been broken. This empowers brands and healthcare staff to extend the dialogue with consumers and patients.

#### Primed for rapid production

These tags also feature a "Tag Talks First" protocol that enables a read-speed up to 20 times faster than conventional NFC solutions. This makes it an ideal technology for use on the high-speed, high-volume production lines found in Jones' manufacturing facilities. The partners are also integrating ferrite shield labels. These will allow the NFC technology to function on metalized packaging, such as the blisterpacks commonly used for cold and flu medications and filled in the Jones Contract Packaging Services facility.

"The partnerships Jones has forged with Sun Chemical, Thinfilm and others illustrate how cutting edge technology can redefine an industry that traditionally produced a simple packaging product," said Peter Kallai, President and CEO of the CPEIA. "It's a win-win combination."

"Jones is levering the capabilities of its technology partners with its industry knowledge and reputation as a print and converting leader in the market to drive the growth of intelligent packaging," said James Downham, President and CEO of PAC, Packaging Consortium.

<u>Watch this video</u> for an inside look at Jones' high-speed production line, which can produce 15,000 intelligent packages per hour.

### About



#### **intelliPACK**

intelliPACK is a smart packaging innovation accelerator co-founded by intelliFLEX Innovation Alliance, PAC, Packaging Consortium and their Members. intelliPACK collaborates with supply chain stakeholders to create awareness, educate and facilitate the broad adoption of solutions for smart packaging – an active or intelligent interactive packaging system that delivers benefits and added functionality to the value chain. intelliPACK unites leading organizations across the packaging value chain, to collaboratively explore, evaluate and mobilize innovative smart packaging solutions. intelliPACK serves North America while sharing solutions globally.

Learn more at: intelliflex.org or pac.ca



#### intelliFLEX

intelliFLEX, a not-for-profit industry alliance, is a vital partner for accelerating the growth of the printable, flexible, hybrid and related electronics sector in Canada. Our technologies add intelligence and connect ordinary objects to enable the Internet of Everything. We unite our 100+ members to build an effective ecosystem of supply chains for flexible, 3D printable electronics, 2D large area printable electronics, wearable electronics, smart textiles and hybrid electronics including related semiconductors, integrated circuits and software. Our programs accelerate the adoption of these innovations for Smart Packaging, Intelligent Buildings and Connected Homes, Aerospace and Defence, Automotive and Industrial Applications, Health and Wellness, Intelligent Documents, and Consumer Electronics. Learn more at: intelliflex.org



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