

Ingersoll Paper Box Co. Limited was founded on a business philosophy that has remained intact for 90 years and has all but ensured a successful future for the customers, suppliers and employees of the Canadian folding carton operation. This philosophy is centered on trust and reliability.

The family-owned company was founded in Ingersoll, Ontario, by Robert Skinner in 1922. The original product was ice cream cones. "We needed the boxes for the cones so that's how we got into the paperboard business," says the founder's great granddaughter Sarah Skinner, Managing Director.

The fourth generation family-owned Canadian company prides itself on its 90-year value proposition to customers. By Jackie Schultz

FROM CONES TO CARTONS



The original name was Ingersoll Cone and Paper Box. The word "cone" was dropped from the name after that portion of the business was sold. The company's growth has been slow and calculated. Sarah characterizes the company today as small to medium sized, employing 70 people and running two shifts. Other members of the Skinner family who have been involved in the business include Sarah's father, Dave, who is President, her grandfather, Ronald, and her brother, John, who heads up the structural design department.



Sarah and Dave Skinner

INGERSOLL PAPER BOX

Ingersoll Paper Box expanded as each new generation of the Skinner family joined the company. From the very beginning, Robert's management style was one of loyalty and trust, treating everyone, including employees and customers, as though they were family. This unconventional business style has carried over to present day.

In the 1940s, Ronald, the second generation to manage the company, nurtured an account that produced Fram filters for the Canadian market. That relationship continues today. His son, Dave, joined the company in 1968, overseeing equipment and building upgrades.

Sarah joined the family business in 1994, working with the sales, marketing and management teams. Her brother, John, joined in 1997. Although the carton converter has been in the same facility for 90 years, the manufacturing portion of the 85,000-sq-ft building is new. The equipment layout was rearranged to improve workflow and efficiency, and the building was expanded to include new equipment, quality control systems, additional warehousing space and new lunchroom facilities. The expansion was completed in 2003.

Quality Assurance

Over the years the company has served a variety of industries, including automotive, food, healthcare and pharmaceutical. Today, pharmaceutical represents about 75 percent of Ingersoll's product mix. The remaining 25 percent is consumer products, such as oil filters for cars, dog treat boxes and confectionary.

It wasn't until about 15 years ago that the company began focusing on the pharmaceutical market. "We used to run automotive aftermarket products. That was our biggest market until about 15 years ago and then we started to see a downhill trend and it was time to diversify," Sarah says.

"Switching to pharmaceutical allowed us to raise the bar," she continues. "We've elevated our level of what's acceptable and I feel it has made us a better company and we produce higher quality product for our customer."

The company is ISO 9002:2000 certified and GMP compliant.

Ingersoll has targeted key pieces of equipment to serve this higher end pharmaceutical market. "We're always upgrading and bringing in new equipment and new technology," Skinner says.

The company has three Bobst folder-gluer, three Bobst diecutters and two 40-inch six-color manroland printing presses. The newest investment is a Bobst Expertfold 110 A-2 high speed folder-gluer configured with AccuBraille for embossing Braille characters.



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The gluer has a Bobst Handypack GT semi-automatic collection table for collecting and pack cartons and a VCX/OT-120 gluing and quality assurance glue system option from Valco Melton. The system ensures optimal quality control for the glue patterns and application of the

Resicol X-697 Blue adhesives supplied by Halltech Inc.

Braille embossing is an important market for Ingersoll Paper Box. "I don't think it's going to be a huge market for us, but I see it as an enhancement of what we provide to our customer," Skinner explains.

All of its Braille embossed cartons are shipped to Europe and Australia where Braille is required by law. The European Directive mandates that pharmaceutical cartons show the name of the medicinal products, and if need be the strength, in Braille format.

Skinner believes this legislation will soon be in place in North America. As such, she wants Ingersoll to be prepared. The installation of the AccuBraille and the Valco Melton BrailleChek™ system is a key part of that strategy.

"It was all purchased to run the pharmaceutical packaging," she says. "As I'm more involved in the industry I'm seeing the trend coming to North America in the next five years. When I saw the technology and how it works on the Bobst gluers, I could see that this would be an asset for us."

Skinner says she was aware of the Valco Melton system and first saw it in operation at Bobst Group's Competence '10 in Lausanne, Switzerland. Soon after, Valco Melton representatives visited Skinner at Ingersoll's Ontario facility to demonstrate their system. "When they came here and showed us how it worked, it was exactly what we were looking for," she says. "They brought in a miniature model. The computer checks the glue and the Braille. It was something that we felt would work well."

The glue detection system consists of five cameras positioned behind the five glue guns, explains Alain Ciclet, Valco Melton Folding Carton Industry Product Manager. The system checks for glue placement, volume and pattern. A color code reader reads the color bars on the glue flap to make sure all the colors on the box are accurate and in register.

Ingersoll is the first folding carton converter in North America to install BrailleChek. Using high speed camera

Valco Melton's touch screen data entry system.



technology and custom lighting, it examines each Braille embossed carton at full production speed, checking the depth and accuracy of each dot.

"The software analyzes the dots, their position and how deep, and the image analysis algorithms tell us if it's correct," Ciclet explains, adding that the system evaluates the entire image and identifies any problems, such as a faulty carton, incorrect Braille or insufficient adhesive.

What impressed Skinner about the BrailleChek system was its ability to identify and eject defective or inaccurate cartons at production speed, running at 65,000 cartons an hour.

Valco Melton's OT-120 control package is a touch screen data entry system that uses an array of simple pictograms and market-specific program symbols for fast and easy setup or changeover. It can accept and integrate up to 16 different glue valves and sensors for multiple and specific applications.

The ValcoLink™ software package offers live remote network connection for troubleshooting and system verification by Valco Melton personnel at the Cincinnati, Ohio corporate office. Service and engineering personnel can instantly confirm correct control settings on Ingersoll's machine, make control system changes and easily identify system problems.

Expanded Capabilities

Ingersoll had been offering Braille embossed cartons for several years, running Braille on the diecutter. Skinner says the AccuBraille technology on the folder-gluer is a more efficient and less expensive way to apply Braille on the cartons. Tooling on the diecutter is expensive, costing up to \$2,000 depending on the number of cartons on a sheet.

AccuBraille takes less than five minutes to set up with a single low-cost tool that Skinner says is about \$200. It can run at production speeds, even at 100,000 cartons an hour. AccuBraille can emboss onto any of the four carton panels,

and its rotary system means an end to dot definition drift over the length of the run, according to Bobst.

Not every job run on the Expertfold requires Braille so the AccuBraille can be turned off. In some instances the Braille is applied at the diecutter and checked with the BrailleChek system during the gluing process on the Expertfold. This is for customers who purchased the older tool and are running repeat jobs.

The Expertfold and Valco Melton systems have been installed at Ingersoll since May. Skinner says the new investment has exceeded her expectations. "It was not like I was taking out a gluer and putting in a faster one. I was adding more capabilities to our line of product. Has it been able to pay for itself? It's busy every single day and we have more and more Braille jobs running on it."

Regarding the Valco Melton system, she says, "The installation was more than pure efficiency," she says. "It was more the accuracy and the 100 percent checking. The purpose was quality."

In fact, Skinner has been so impressed with the Valco Melton system that Ingersoll is purchasing one for its corrugated business. Last year Ingersoll began manufacturing corrugated shipping containers to use internally. The next step is to purchase a semi automatic gluer to expand that portion of the business. Skinner says she is still evaluating machines.

The plan is to grow that portion of the business while also maintaining the carton business. In terms of additional investments, Skinner says she is going to wait until after she attends DRUPA.

What does she attribute Ingersoll's success to? "We have great customer service, and a friendly staff. We're a small town and very close knit and we're able to make decisions on the fly and meet our customers quick demand."

That philosophy hasn't changed in its 90-year history. In his President's Message on Ingersoll's web site, Dave Skinner writes: "Back then a rush order was a rush order just as it is today and being First To Market was no less important than it is now. Our reputation as a trusted supplier and our business itself have grown through the success of our customers. We know, just as they did in 1922, that our customer is depending on us."

