



# Case Study



## Redesigned Print and Apply System

Wholesale bakeries supply the stores with boxes of doughnuts. And it is in these bakeries that a special labeling solution speeds the baked goodies to their destinations. A unique printer/applicator, customized for Krispy Kreme and with a durable print engine from SATO America, keys the stand-alone system.

The doughnut maker's box labels go round and round – but they always end up in exactly the right place, thanks to a custom labeling solution.

How fast do production lines have to go?

When those production lines are carrying Krispy Kreme doughnuts ready for shipment to grocery stores, the answer is as fast as humanly possible.

Many people are familiar with Krispy Kreme, which makes those absurdly tasty confections that are quickly becoming known worldwide. They may have stopped by the company's doughnut shops, or picked up



## Labeler Company Rises To Challenging Demands of Wholesale Bakeries | Krispy Kreme streamlines label process with a portable print and apply unit

a box or two at area grocery or convenience stores.

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Like the ingredients used to start the baking process, the start of this solution was humble enough. Ellington, Connecticut-based Action

Packaging Systems sent out one of its regular mailings, looking for business. The family-owned business supplies labels and labelers, including its dependable Gold Seal tamp/blow printer/applicator unit, to a growing list of customers throughout the U.S.

The mailing went to a distributor who dealt with Krispy Kreme and knew the company was looking for a labeling solution. He mentioned the need to Action Packaging President Doug Rice. Rice made his way down to Krispy Kreme's headquarters in Winston-Salem, NC, and learned the company was searching for a



printing solution that would quickly and accurately place round, variable-information labels on different-sized doughnut boxes as they came to the end of the bakeries' conveyor lines.

Though Krispy Kreme was testing other solutions, Rice was confident he had the right one – a customized Gold Seal. He was so confident, in fact, that

he went ahead and built a prototype, even painting it the distinctive Krispy Kreme green. He did it because "I just felt really good about this one. They seemed like good, honest people."

His judgment, like the doughnuts, was perfect, and his effort paid off. In surprisingly short order – from first contact to first unit shipped, about six weeks – the special printer/applicators began precisely applying the labels in the wholesale bakeries. Currently, approximately 30 units are streamlining production for Krispy Kreme suppliers.

Rice says one thing Krispy Kreme executives liked about the unit was its simplicity. The Gold Seal printer/applicator has just two buttons – no knobs to adjust, no gauges, no switches. "It's what we call 'second-shift-proof,'" says Rice.

The semiautomatic system is completely self-contained on a cart, neatly packaged with the works – air compressor, vacuum pump, electrical – in a cabinet underneath the unit. Wires run from cabinet to junction box to the unit. Finally, a drawer containing a keypad slides out of the way when not in use.

"It's very portable, and that's important," says Tim Honeycutt, Certified Purchasing Manager and vice president of purchasing for Krispy Kreme. "We use our production areas for a variety of products, and not all of them need the printer there. So we can roll it in or out as needed."

Durability was an important consideration, since bakeries can be a bit dusty and production areas are regularly washed down. Again, Rice had no doubts about the Gold Seal. It's built to wear well, to "just run" every day. For example, says Rice, "our take-up waste motor has no chains, no belts. It's direct drive and electric. We've never replaced one," he says. And its direct-thermal, SATO M8459Se Series Print Engine "has great print head life. It prints 203 dots-per-inch resolution

with a maximum print width of 4.4 inches and a print speed of 5 inches per second. It's simple, easy to diagnose and service, and easy to get parts. It also accepts jobs on the go faster than others."

### Simplicity In A Cart – With A Little Computer Mixed In

The round, 1 1/2-inch label Krispy Kreme needed applied is simple enough. It contains a price, sell-by date and store number in addition to the preprinted graphics. Though simple, it is essential that it be there, and in the same place box after box.

"Previously, we had hand application of labels in our stores. It was very labor-intensive, and there was a lack of standardized presentation of the product," says Honeycutt. "These [printer/applicators] sped up the production, gave us consistent placement and proper placement on the box, and overall, that improved the look of the brand."

In the wholesale bakeries, one printer/applicator is assigned to each line. The number of lines varies, but most bakeries working with Krispy Kreme have between one and three units.

As the freshly boxed doughnuts come down the various conveyor lines, at an average rate of 20 dozen per minute, workers pick up and place each box under the applicator. Here, another bit of customization gives a helping hand.

A PRINTPAD™ barcode printing terminal from TEKLYNX International has been connected to the Gold Seal to allow workers to key enter the price and sell-by date when prompted by the system. The PRINTPAD, preprogrammed with all non-variable label data downloaded from a PC running LABELVIEW™ bar code labeling and integration software from TEKLYNX, and installed by Action Packaging Systems, feeds that data plus the store number to the printer, which creates the label. The tamp/blow application completes the cycle, adjusting instantly for different-sized boxes (its stroke ranges from 1/2 inch to 4 inches). The worker then takes the perfectly labeled box and stores it on a rack for later shipping to the appropriate store.

Getting the computer data into the unit was another essential part of the application, and something Rice had not encountered before. "They wanted it connected to a computer, and I said, 'Well, I'm not sure how to do that, but I'll figure it out.'" He credits the Print Engine Sales Manager for SATO for turning him on to the TEKLYNX PRINTPAD. Action Packaging programs the keypad/terminal using a PC, storing all essential label data within it, and ships it ready to go with the Gold Seal.

