

# New bottling line shrink wraps bottled water

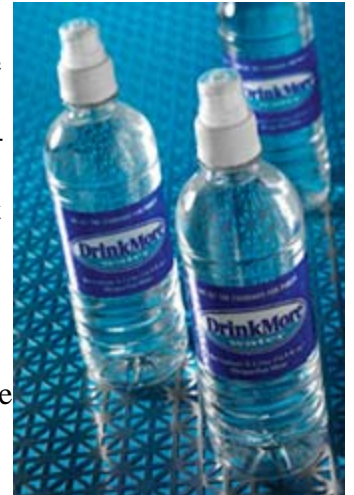
**A new bottling line at Drinkmore Custom Water includes a shrink wrapper that bundles a range of sizes of bottled water in plastic film without requiring paperboard pads or trays.**

*By Jack Mans, Plant Operations Editor*

DrinkMore Custom Water (DCW), Gaithersburg, MD, produces and sells polyethylene terephthalate bottles of water ranging in size from 12 oz to 1.5 L under its DrinkMore brand, but the majority of its business is the design, production and delivery of custom-labeled bottles of water to a wide range of clients nationwide. It produces orders both large and small, with the majority of the customers being commercial businesses, but it has produced custom-label water for weddings, birthdays, bar mitzvahs, retirement parties and many other events, as well as for retailers looking to gain new business via label promotion. "We may run fifty different labels in one day, so the key to this operation is that we designed our labeling operation so that we can run as little as one case [24 bottles] for a customer, we can switch between different labels quickly, and we can print the labels for those short runs in-house," says DCW president John Walsh. Clients that have purchased custom-labeled bottles include the U.S. Senate, the Robert Trent Jones Golf Club in Prince William County, VA, for sale at the Presidents Cup golf tournament, Microsoft Corp. and Best Buy.

DCW's in-house design staff works closely with its clients to develop unique label designs. In addition to a standard, pressure-sensitive label, it also offers a patented coupon label, which has a coupon area that is easily and neatly removed from the bottle. Clients can also use its labels to conduct contests, through the use of scratch-off areas directly on the bottle. Its labels are printed on state-of-the-art printing presses, and the company can reproduce photographic images or match PMS colors with no problem. DCW also can print its labels such that there are two different labels in sequence on each roll, so that they appear A-B/A-B. Printing labels in a sequential manner allows for half of the bottles in a case to have one label and half with another. DCW's sister company, Drinkmore Water, opened its first water store in Rockville, MD, in 1993 to produce ultra-purified water for its customers to transport home for consumption. In 1996, DrinkMore Water began delivering its ultra-purified water to homes and offices in the Greater Washington and Baltimore region, and now it has more than 12,000 customers. In 2006, the company moved to a 40,000 sq-ft facility in Gaithersburg, where it moved its 3- and 5-gal water line (information about this line will follow in a later issue) and added the new PET bottling line owned by DCW. It also installed a new, state-of-the-art water purification facility in the plant.

*Packaging the filled bottles was a major concern for DCW, so it installed a Series Model PH32HL intermittent-motion shrink wrapper with a custom-built infeed from Polypack, Inc. ([www.polypack.com](http://www.polypack.com)). "We wanted to eliminate paperboard from our packages, and this machine can run most of our bottles, even in twenty-four-packs, without trays or pads," says Walsh. "I've worked with Polypack for a number of years, and they've always done an excellent job for me. Their service is great. One morning, my old shrink wrapper's main drive shaft broke, and Polypack machined a new shaft that day and shipped it to me overnight, and we were up and running the next day. In this business, you have to have confidence in your suppliers, so I never even thought about anyone but Polypack."*

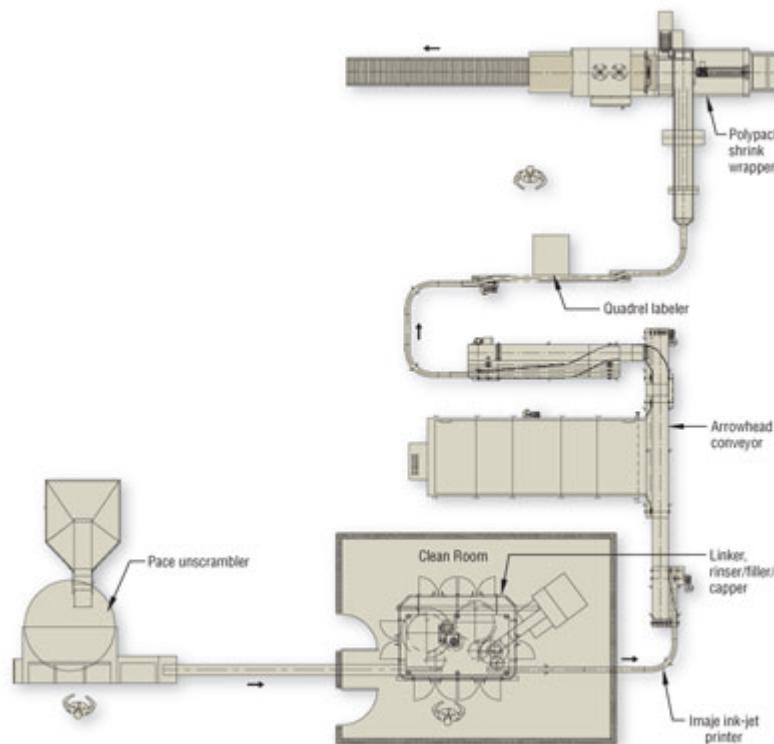


*Wrapped bottles enter the shrink tunnel.*

*DCW runs three pack configurations—a 2x3, a 3x4 and a 4x6. During PD's visit, the machine was running a 4x6 24-pack of 0.5-L PET bottles. The bottles enter the PH32HL wrapper through four lane dividers, and when sensors above the lanes detect that the lanes are full, a gate releases six rows of bottles for packaging. A sensor triggers a motorized pusher assembly to push the bottles through the wrapping section of the machine, and the bottle-feeding process is repeated. A paperboard-pad dispenser is mounted in front of the film curtain and will place a pad on a popup plate before each group of bottles enters the plate, if the plant is running a pack that requires the paperboard pad.*

Two rolls of film are mounted on the end of the machine and enter the machine perpendicular to the direction of infeed-bottle travel. Each layer of film passes over a series of dancer bars that feed it into the wrapper. The bottles are pushed through the film curtain and travel on top of the bottom layer through the wrapping section, while the top layer travels concurrently above the bottles. The leading edges of the two pieces are heat-sealed together as the group leaves the wrapper. This simultaneously seals the back edges of the two layers of film on the leading group of bottles and the leading edges of the film on the following group. The seal bar also cuts the film apart between groups of bottles. Multiple sensors throughout the wrapper monitor the operation and shut down the machine and trigger an alarm if any problems occur. For example, if the bottle pusher takes too long to travel through the wrapping section, it will initiate the shutdown and alarm. The bottles then enter the shrink tunnel, which tightly shrinks the film around the bottles and creates a very tight bundle.

The wrapper incorporates a programmable-logic controller, as well as a color-touchscreen operator interface with message display and self diagnostics. The unit includes preprogrammed settings for conveyor speeds, timing and temperature settings for fast, accurate setup when changing products.



*Water bottling line.*

**More information is available:**

- Polypack, Inc., 727/578-5000. [www.polypack.com](http://www.polypack.com).

**PUBLICATION**

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