Private Label Water Bottler Realizes Pure Savings with Intermittent Adhesive Dispensing

Simple, Cost-Effective EcoBead™ Pattern Generator Enables OptiBond™ Solutions

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Private Channel Produces a Revenue Stream

When Domenick Traina Sr. and Larry Cacciatore decided to enter the bottled water business in 1998, they knew they needed to be different. So they developed an efficient, flexible operation and a unique packaging concept that allowed them to satisfy the needs of every customer.

While beverage giants produced millions of cases of bottled water daily, Traina and Cacciatore saw an opportunity to create something unique from a product many saw as a commodity.

Ultra Pure Bottled Water, Inc., of Tampa Florida is a leading provider of private-label bottled drinking water to businesses and organizations in Florida and the Southeastern United States.

“Private labeling gives our customers the opportunity to promote themselves economically, by putting their name and brand on a product that everyone uses,” says Traina.

Indeed, the privately held, family owned business employs between 25 to 30 people yet, produces over 100,000 cases of bottled water per month, for hundreds of customers including hotels, law offices, golf properties, dance clubs, restaurants, automobile dealerships, banks, medical and dental offices, realtors and health clubs, to name a few.

The company specializes in short-runs of custom-labeled bottled water, supplying customers with quantities ranging from a few cases, to full truckloads.

Customers can use label templates available on the Ultra Pure website or provide their own label artwork. Printed labels are applied to bottled water immediately after it is bottled and capped.

Packaging and Production Flow

On the Ultra Pure Water production line, a Polypack TR Series tray loader/former places 8 ounce, 12 ounce, 16.9 ounce, or 1 liter bottles into 24- or 12-tray packs. Trays are glued with a Nordson ProBlue® 7 adhesive melter and Nordson adhesive dispensing guns.

Historically, the company’s machinery applied two, 2-inch beads of Jowat 282.20 EVA adhesive to each flap, on either side of the tray.

Fast and Simple Way to Adhesive Savings

Always looking for ways to increase efficiency and flexibility as well as reduce costs, Ultra Pure installed Nordson EcoBead™ pattern generators and MiniBlue® II dispensing guns in August 2012, with the goal of optimizing adhesive use and costs.
The EcoBead pattern generator is a drop-in, inline device that connects to the Nordson SP solenoid valve on a Nordson MiniBlue II dispensing gun and lets packagers realize adhesive savings of 30- to 50-percent by replacing traditional longer, adhesive beads with intermittent bead or dot patterns.

The compact 5 in. x 1 in. x 0.70 in. (130 mm x 26 mm x 18mm) device eliminates the need for, and costs associated with PLC reprogramming and stand-alone pattern control devices.

Despite using less adhesive, there is no negative impact on adhesive bond strength since bonds are strongest at the beginning and end of each bead. Applying shorter, intermittent beads increases the number of end points and maintains bond strength while reducing adhesive use and costs.

Historically Ultra Pure used an average of 6 lbs. of adhesive per shift, 60 lbs per week and 3,120 lbs per year. Adhesive cost was typically $1.84 per lb.

Since the switch to intermittent adhesive bead dispensing using the EcoBead pattern device, adhesive use has been reduced by 50-percent, to just 30 lbs. per week. Nordson estimates a payback on capital investment of 12 months or less for most customers. Owing to the modest size of the UltraPure operation, return on investment is estimated at just under 20 months.

“That’s significant savings for a small company like ours where we try to improve efficiency every aspect of our production process,” says Traina.

The ease of achieving savings was as important to Ultra Pure as the savings themselves. “We just attached the cable to the back of the air solenoid and the other end to the machine PLC cable. It took maybe a couple of minutes. Then we used a regular screwdriver to turn the dials on the EcoBead device and choose the amount of glue savings we wanted and the size of the adhesive beads. There was no programming or changing the PLC. It was really easy,” said son, Nick, who manages the production line at Ultra Pure.

“Every improvement and cost saving measure we can incorporate helps us move closer to reaching our future plans for growth and expansion,” says Traina Sr. “Working with Nordson is helping us do that.”