



The WIDESIDE of PACKAGING

UTILIZE DIGITAL PRINT FROM FOLDING CARTONS TO CORRUGATED

by Cassandra Balentine

Packaging represents a unique segment of the printing industry in that it is an application that can't be replaced with an electronic alternative. As trends towards shorter runs and custom applications continue, digital print technologies provide the solution.

For print providers, packaging offers a new revenue stream. For traditional converters, the addition of digital equipment enables new opportunities for prototyping in house, as well as hitting low volumes that were previously unattainable.

There are many types of packaging, from prototypes and labels to corrugated applications. Therefore, many technologies serve a variety of digital requirements.

Versatility Wins

CSW, Inc. is a third generation, family owned packaging premedia company established in 1937. Its 250 employees work out of three locations, including its headquarters in Ludlow, MA, and additional facilities in Rochester, NY and Sylvania, OH. The company primarily serves North America.

CSW provides marketers and printers with the means to optimize brand delivery and make packaging more efficient and impactful for its customers and their end users. "We translate design intent to printers and retailers and communicate production opportunities to designers and brands," explains Marek Skrzynski, technical director, CSW.

The print provider offers virtualization and prepress services from product management, production art, three-dimensional (3D) rendering, shrink counter-distortion, and digitally printed prototypes to color managed premedia services, flexographic printing plates, and corrugated dies.

Dedicated to packaging, Skrzynski says 100 percent of its work is folding cartons, shrink wraps, labels, and shrink sleeves to flexible bag, pouches, and multipacks. The machines are utilized everyday.

"We outsourced all of our digital printing, but now we produce about 90 percent of our work in house. We still occasionally outsource large corrugated projects or high-volume label work," he adds.

Above) CSW, located in Ludlow, MA, worked with its Roland VersaUV devices to create three varieties of shrink sleeve labels for Hummus Plus.

When CSW decided to bring flatbed printing into its business, it learned about the versatility, efficiency, and output quality of Roland DGA Corporation's VersaUV devices at print shows and seminars organized by vendors. "We made the initial investment in Roland technology in 2012, and purchased a second device a year later," explains Skrzynski.

Skrzynski acknowledges that when it comes to any type of new technology, some kind of learning curve is expected. "Fortunately, the day after install we started printing, which was great. Our challenges lay in learning about different media and related output settings, as well as converting methods needed for each new project. We don't print the same thing every day—it could be 500 embossed labels one day, five folding cartons with spot varnish the next, and 50 clear shrink overwraps the day after that."

In addition to media versatility, the company was attracted to Roland's machines for color gamut, small footprint, and "the fact that we can print production media used by converter clients," says Skrzynski.

Digitally printed prototypes make up a relatively small portion of the company's business, but it is a rapidly growing segment. Sales in this division of CSW doubled in 2016, and with most projects produced on the two Roland devices.

CSW's customers appreciate that special effects like emboss, varnish, and metallic are simulated, as well as the availability of white ink. "All of this on just about any media, and with color dialed in pretty accurately. They are also happy when they realize there is no minimum run—we can make as few or as many as they need," he explains.

The company recently produced three varieties of shrink sleeve labels for Hummus Plus. The brand launched a package that consisted of a cup of hummus paired with a cup of chicken bites or pita chips, bundled with a shrink sleeve label. CSW provided counter-distortion services for the shrink label, 3D renderings for label placement approval, and produced shrink sleeve comps. The interior of the cups were painted to look like they were filled with product.

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Along the way, CSW consulted with Hummus Plus' co-packer and production label printer about changing the dieline to make the cup wrap better. "We did several rounds of comps, as our client decided they needed more, from about 15 to start up to a few thousand for the co-packer," explains Skrzynski. The comps were used for sales samples, a photo shoot, and a test run at the co-packer. This product first rolled out in one grocery chain in the Southeast and is now picked up by national retailers.

Corrugated Focused

Established in 1990 by industry veteran Jim Watts, and partner, Nick Lindsay, VP of sales, The Warren Group Incorporation is a packaging design and production provider based out of Santa Fe Springs, CA. The company serves clients nationwide. It has 25 employees and works out of a 15,000 square foot facility.

With an appreciation for high-quality graphics, Watts took his background in industrial packaging and utilized it in a new venture creating packaging prototypes. From there, he planned to help clients find a manufacturer. "I had a unique situation. I understood how it all works, I could get more into design than a typical salesperson. Once I started doing it, people started asking me to do the same

thing and before long I was concentrating 100 percent on prototyping."

Veering from its design and brokerage focus, the company decided to bring in its own equipment for short-run packaging work in 2008. In addition to Watts' packaging background, his partner came out of digital signage, making the company experts in both industries.

Up until 2008, The Warren Group used roll-to-roll printers, printing to vinyl and paper, then mounting and CAD cutting for prototype work. "When the flatbed technology was in development, most of my customers were corrugated and it was a natural progression," explains Watts.

The company's first serious investment in digital was an HP, Inc. Scitex FB950 printer, followed by two Canon Solutions America Océ Arizona 550 XTs, the second replacing the HP. The Océ lineup served it well, until advances in flatbed printing equipment came to a point where it made sense to invest in new technology. The latest purchase was the EFI VUTEK LX3 Pro, which was installed Summer 2016. With this mix of equipment, the company effectively produces packaging, displays, and signage.

It also has two 60x120-foot MultiCam Inc. 3000 Series CNC Routers and a Gerber Technology M Series digital cutting system for finishing.

The Océ Arizona 500 XTs are used for 4x8-foot, non-corrugated materials. The EFI VUTEK LX3 Pro prints all of the corrugated work, whether it is one or 500 sheets.

The shop generally runs the EFI VUTEK LX3 Pro in eight-color mode, but it also offers a four-color mode. Watts says that it has output as many as 92 boards an hour using four-color mode.

Another benefit of the EFI VUTEK LX3 Pro is that it features UV LED curing technology. "It uses LED light for curing the inks, which runs at 80 degrees versus 130 with traditional UV lights," explains Watts. This enables immediate CAD cutting.

Currently, Watts estimates that corrugated makes up about 50 to 60 percent of its product lines. This is mainly store floor displays, pallet skirts, and pallet displays for wholesale retailers and point of purchase (POP) standee-type work. "We also do a considerable amount of wide format chip-board displays. The key for us—for anyone to make sense in digital—it has to be large format and it has to be a high-end graphic for us to compete," he adds.

The Warren Group continues to shift its breakeven point, enabling it to offer longer runs. "My breakeven point is a question I'm asked about every day, and the answer changes weekly since we've had the EFI VUTEK LX3 Pro. Before, I would say packaging and displays would be 150 max. After, it is up to 1,100 displays, 700 pallet skirts, and we continually try to define what it is," according to Watts.

Flatbed Potential

PAP emballage & display provides specialty services for cardboard, packaging, and display. Established in 2005, the company employs a total staff of 28, 16 of which are predominately administrative roles, while the other 12 run production. Its headquarters is in Vejle, Denmark with a satellite department in Copenhagen, encompassing a total area of 3,000 square feet. The company mainly services Denmark, but also has clients in Germany, Norway, and Sweden.

It primarily provides POP items and packaging—including prototypes.

In 2011, the company began selling products produced on flatbed printers. These jobs were initially outsourced. "We bought our printer in 2013, when our digital volume had reached an amount that made it profitable to buy our own flatbed," says Frank Rosenquist, CEO, PAP. He explains that the information from its initial research and through meetings with prospective vendors led them to the best product for its needs at Nize Equipment in Skanderborg.

The search for a flatbed printer came from a goal of offering customers a quick solution to solve daily challenges. "We decided to buy the swissQprint AG Oryx flatbed because it was the best product at the right price," says Rosenquist. Additionally, the staff at Nize Equipment is professional and service minded.


The Oryx flatbed printer offers six color channels and is configured to handle PAP's daily requirements.

Today, the shop's digital department accounts for approximately ten percent of its overall business. This is all revenue produced using the flatbed.

Rosenquist estimates that about 25 percent of the work is considered packaging. "In our design department we develop packaging every day," he adds.

Rosenquist says it recently delivered 50 sales suitcases for a coffee brand. "The coffee brand is high end and the customer needed a package that would substantiate this. Because it needed 50 items, we decided on digital production," he shares.

Wide Format Packaging

A variety of equipment is well suited for the production of labels, shrink sleeves, folding cartons, and corrugated. The latest print advancements introduce high-quality output, expanded color gamut, and media handling capabilities that serve this segment. 

 See page 24 for more info.

1) Established in 1990, The Warren Group is a packaging design and production provider based out of Santa Fe Springs, CA.