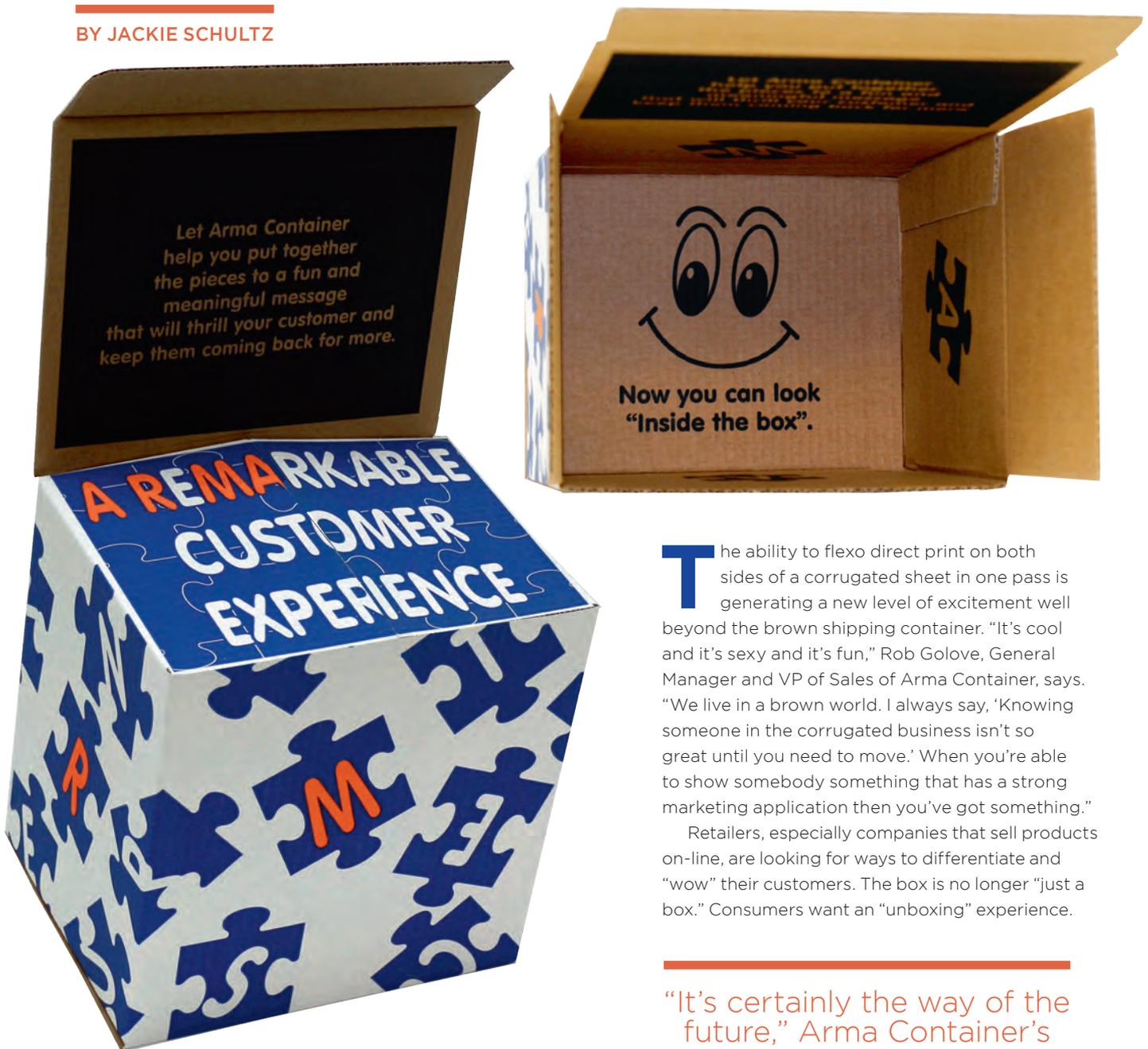


# THINKING OUTSIDE (AND INSIDE!) THE BOX

BOARD CONVERTERS ARE 'WOWING' THEIR CUSTOMERS WITH FLEXO PRINTED GRAPHICS ON THE INSIDE AS WELL AS THE OUTSIDE OF THE PACKAGING.

BY JACKIE SCHULTZ



Arma Container has been producing inside/outside printed boxes since 2016 with its G-Grafix flexo folder-gluer.

The ability to flexo direct print on both sides of a corrugated sheet in one pass is generating a new level of excitement well beyond the brown shipping container. "It's cool and it's sexy and it's fun," Rob Golove, General Manager and VP of Sales of Arma Container, says. "We live in a brown world. I always say, 'Knowing someone in the corrugated business isn't so great until you need to move.' When you're able to show somebody something that has a strong marketing application then you've got something."

Retailers, especially companies that sell products on-line, are looking for ways to differentiate and "wow" their customers. The box is no longer "just a box." Consumers want an "unboxing" experience.

"It's certainly the way of the future," Arma Container's Rob Golove says.

## The Haire Group has installed Apstar flexo folder-gluers and rotary diecutters with inside print units at plants around the U.S.

Arma Container, a sheet plant in Deer Park, N.Y., has been printing on both sides of a sheet in one pass for several years now at the request of a customer that sells products on-line. "It's certainly the way of the future because for our customer who is an Internet company they want to deliver an extra message. They want to wow the customer when they open up the product," Golove says. "What's nice is it gives a call to action that you could easily change almost like a coupon inside your box. We've found a lot of our customers are looking at almost 100% coverage on the outside with a message on the inside. That secures their culture with their customers. It's a phenomenal marketing tool."

New developments in corrugated printing technology are supporting this trend. Hycorr was one of the first companies to introduce a top print rotary diecutter more than 10 years ago, installing it at Genesis Packaging in Chicago. The 66- x 115-inch machine printed one color on top and three on the bottom of the sheet. Since then, Guangdong Dong Fang Precision Science & Technology Co. (represented by the Haire Group), BW Papersystems, Guangzhou Keshenglong Carton Packing Machine Co., Ltd. (KL) (represented by Global Boxmachine LLC), Latitude Machinery and SUN Automation, have introduced single pass inside/outside printing solutions.

Arma Container was using two machines to produce inside/out printing orders and challenged BW Papersystems in 2016 to come up with an inside/outside solution. "You had to plan to take down two machines and you had to be at least 60% through the diecutter before you could



All G-Grafix models from BW Papersystems can be configured with single-pass double-sided printing.

start setting up the other machine," Golove says. "Our Field Sales Manager (Stephen Weil) wondered why we couldn't have a machine that prints both sides in one pass."

As a result, Arma Container was the first installation of a G-Grafix flexo folder-gluer with top and bottom print units. The machine has two outside and one inside print stations and a diecut unit. The efficiencies gained are worth nothing: eliminated 7,496,996 additional feeds; eliminated 123MSF of dunnage needed for the first pass; eliminated 479,800 LF of strapping needed for the first pass; eliminated 4,136MSF of waste accumulated for

the first pass (1.9% waste); reduced direct labor by 2749 hours; reduced indirect labor by 547 hours

### Finer Printing

The Haire Group has installed Apstar flexo folder-gluers and rotary diecutters with inside print units at plants around the U.S., including Rand Whitney, Cumberland Container Corp., Akers Packaging, Acme Corrugated Box Co., Inc. and Abbott-Action, to name a few.

Abbott-Action's six-color Apstar HG2 1628 rotary diecutter has two top printing units, four bottom printing units and a servo dual slotting section in addition to the diecut



Abbott-Action's Apstar rotary diecutter has two top printing units and four bottom printing units plus a dedicated UV coating station.

“Our customers want packaging that they can connect with. They want the unboxing experience,” Wasatch Container’s Ryan Frisch says.

section, enabling it to print two-color inside and five-color outside. A seventh print station was added after the machine was installed as a dedicated UV coating station. The configuration is one of the most sophisticated in the country.

Less than 10% of the jobs run on the new machine are inside/outside print, however, that percentage is expected to grow significantly as the Attleboro, Mass., plant hones its printing excellence. “The majority of the work we’ve done so far is one-color inside,” Chuck Slingerland, Abbott-Action Vice President of Sales and Digital Operations, says, “For orders that require more than two colors on the inside we’re running them on the Jetmaster (digital press from Barberan) and then running through the Apstar.”

Acme Corrugated Box Co., Inc. installed an Apstar 1632 HG2 rotary diecutter at its Hatboro, Pa., facility last year. Jeremy Cohen, Vice President of Operations, had a few accounts that wanted inside/outside print, which required two passes. With the ability to print two colors on the inside and three colors on the outside of the sheet, the new Apstar can achieve the same results in one pass.

Based on the current book of business, Cohen says he is pleased with results. “We configured this machine different from our other flexos and rotary diecutters so that I can run blow and go if I want to, but



Acme Corrugated’s marketing promotion for two-sided printing.

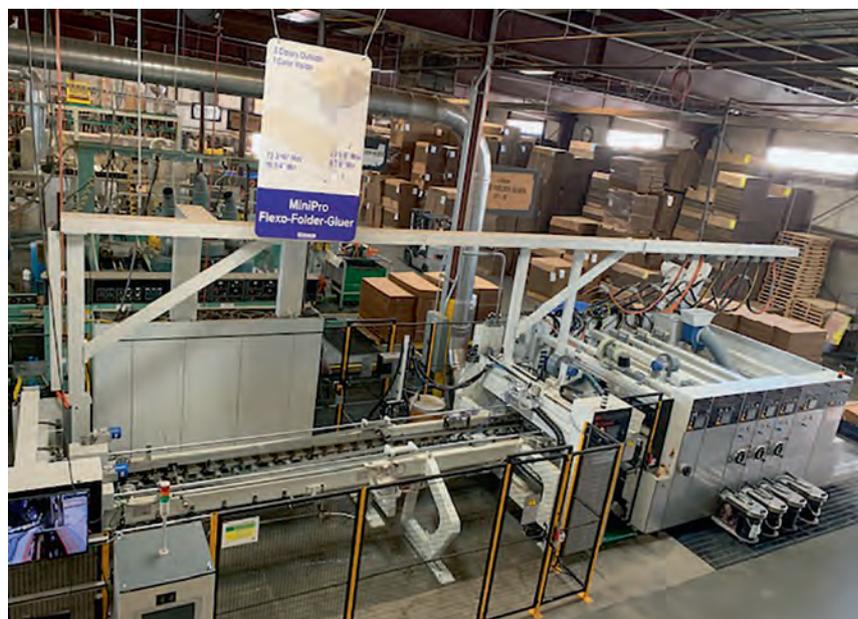
I can also do some finer printing.”

The diecutters at Abbott-Action and Acme both have dryers from JB Machinery.

“If I want to do full coverage, that’s something that we haven’t been able to do very successfully in the past,” Cohen says. One customer has a box that is full coverage black print top and bottom. “Now I can run it at more production speeds with the dryers,” he says.

### In-line at High Speed

Inside/outside printing is becoming a niche market for Wasatch Container. The North Salt Lake, Utah, sheet plant began printing on both sides of the sheet about three years ago, running jobs in two passes. The company’s new Curioni 618 MiniPro from BW Papersystems allows it to run the same jobs in one pass. The four-color flexo folder-gluer is configured for three-color outside and one-color inside.



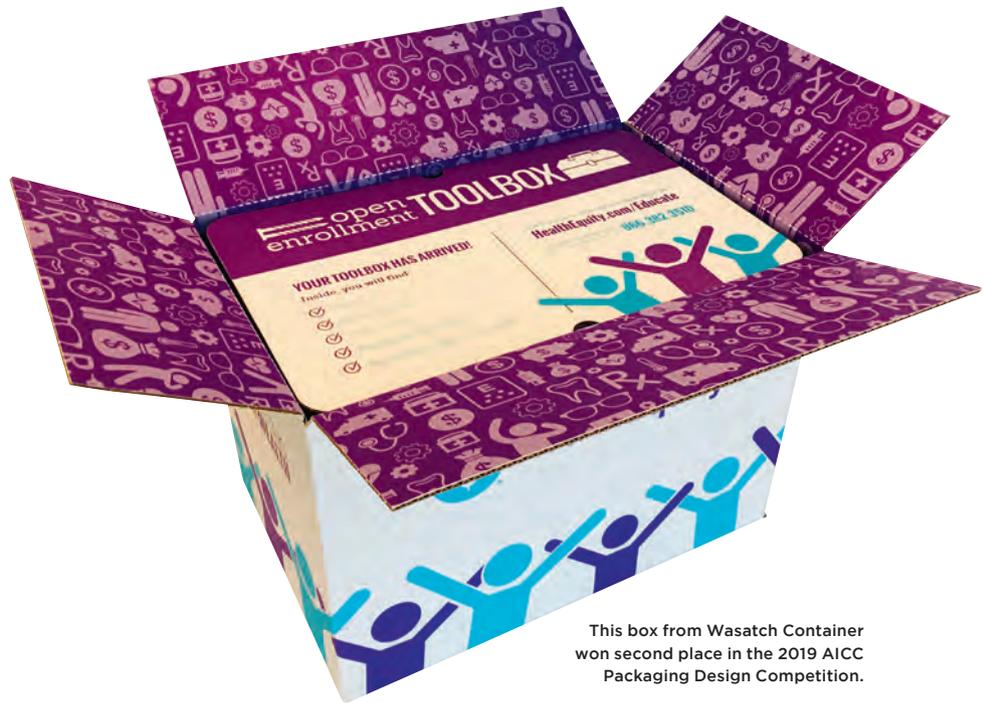
For inside/outside printing jobs Wasatch Container purchased a Curioni MiniPro.

“We had one product where we were running it through our rotary twice and then putting it through a Bobst diecutter because the diecutting was so intricate,” Wasatch Container’s Seamues Ramos says.

Ryan Frisch, Wasatch Container Sales Manager, says Wasatch purchased the machine for two reasons. “One, we needed to invest in some modern technology, and this machine makes very good square brown boxes. It does quick setups and runs at high speeds, which is critical when you’re making RSCs. The other reason is our customers want packaging that they can connect with. They want the unboxing experience. They say one in five consumers have watched an unboxing video. I also read a statistic that 56% of customers’ re-purchasing decisions are influenced by their interactions with the packaging. That’s all growing mainly through the e-commerce world. And retail is growing as well.”

Less than 10% of the orders produced on the Curioni are printed on both sides. “It’s business that we’re building,” Seamues Ramos, Wasatch Container Operations Manager, says. Frisch adds, “Ninety percent plus is still brown boxes because we run a lot of brown boxes. Inside printing is a value-added segment. The machine doesn’t take a whole lot more to print on the inside versus the outside.”

To achieve the same results Wasatch was double or even triple passing jobs. “We had one product where we were running it through our rotary twice and then putting it through a Bobst



This box from Wasatch Container won second place in the 2019 AICC Packaging Design Competition.

diecutter because the diecutting was so intricate,” Ramos says. “Now the majority of that type of business we can run in-line at high speed.”

Maximum speed on the Curioni is 22,500 sheets per hour and setup times are typically under five minutes. “For an inside print job, we’re probably looking at a seven-minute setup and we’re probably running almost five to six times as fast as what we could previously run,” he says.

“The way we grow is by offering innovative solutions like two-sided printing, and this machine is such a fast setup that we can make money running 500 boxes because of the

quick setup,” Frisch says. The machine can run blank sizes ranging from 7- x 7-inch up to 23.5- x 74-inch.

While inside printing was certainly a motivating factor for purchasing a new machine, Frisch and Ramos say the more important quality was the ability to run existing business. Eighty percent of the sheet plant’s current book of business can run on the machine.

### Sales Tool

Latitude Machinery Corp. is currently quoting inside print on all its brands of flexo folder-glueers and rotary diecutters with repeats from 25- through 66-inch, according to Rob Casella, Global

Latitude Machinery Corp. offers inside print on all its brands of flexo folder-glueers and rotary diecutters.



“Always try to give your salespeople the most tools in their toolbox,” Jim Schiffman of Global Boxmachine says.

Product and Business Development Manager, SUN Automation Group. Last year, SUN Automation became LMC’s exclusive representative in North and Central America. “Since we began working with LMC, we have seen significant activity in North America for inside print,” Casella says. “LMC has over 100 machines installed in North America and plans to install an inside print rotary diecutter unit in the first half of 2020 in the U.S.”

Diamond Box in the UK installed a five-color model 1625 rotary diecutter from LMC in 2017. It is configured with three outside and two inside print units.

“LMC is not SUN’s only solution,” Casella says. “SUN’s own engineered and built 625RDC has inside print capabilities.” The company also offers its patented Spectrum® inside print units for many OEM machines. Recently, SUN designed, manufactured and installed a Spectrum inside print unit for a 1990’s vintage Ward rotary diecutter and will ship four more units this year for Ward and United rotary diecutters. SUN can supply Spectrum units for most rotary diecutters and flexo folder-glueers.



SUN Automation installed a Spectrum® inside print unit on a 1990’s vintage Ward rotary diecutter.

Global Boxmachine introduced the KL line of flexo folder-glueers and rotary diecutters with top and bottom printing capability to the North American market at SuperCorrExpo 2016. The company has sold 21 machines. Jim Schiffman, President and CEO of Global Boxmachine says the interest is very strong and the market applications for inside print continue to expand. “With the experiences I was observing over the last few years with my son opening his iPhone and posting a video on-line and with more people buying online, I just knew there was something to this,” he says.

A machine that can help deliver that “unboxing experience” is a smart marketing move, Schiffman says. “Always try to give your salespeople the most tools in their toolbox.”

With inside printing, board converters see opportunities for higher margins. “There is a great opportunity to upsell the customer into that experience and that should come with a higher value box. One really nice thing is no one else in our market is doing it so if you get them into it and they love it you lock them into the business,” Frisch says.



The KL line of flexo folder-glueers and rotary diecutters from Global Boxmachine have top and bottom printing capability.

Cohen agrees. “One of our salespeople came up with the idea that even if we have a customer that is just traditional outside print, maybe we can sell them on something they need to print on the inside. Then we can insulate ourselves.”

Acme is taking a somewhat different approach to the market, installing a machine first and then building the business. “We have not done a ton of work yet in that space but we’re starting to do more,” Cohen says. “I don’t know where the market is going to go yet. We bought the machine on a hedge. We think the business is out there. We didn’t have enough to buy the machine based on it but at the same time this machine can do regular printing too. At the end of the day, it’s about can we make some money doing this and can we make more than we would make if I was just running regular stuff.”

For Alma Container, the market opportunities have been strong. “The investment has already paid for itself in three years,” Golove says. “Amazon thankfully has taken all the attention of the integrators with their blow and go strategy, leaving the smaller and medium sized Internet companies to build their customer loyalty by delivering an experience and the only way you’re going to get that experience is inside the box.” ■