

FLEXO®

APRIL 2008

THE FLEXOGRAPHIC TECHNOLOGY SOURCE

VIEW THIS ISSUE ONLINE NOW AT
WWW.FLEXOMAG.COM

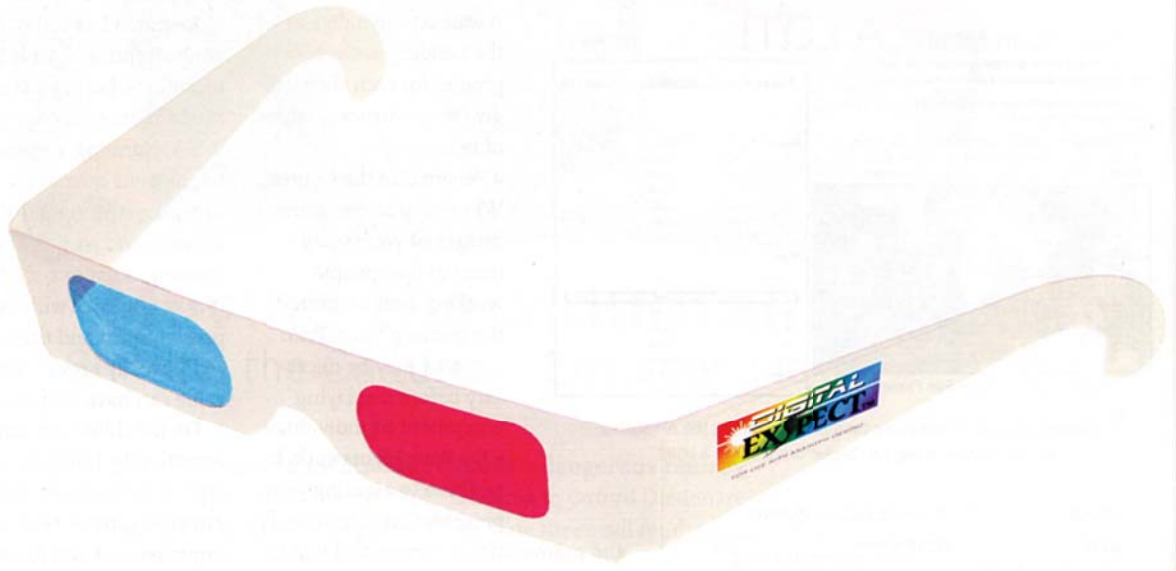
FFTA'S OFFICIAL INFO FLEX 2008 EXHIBIT GUIDE



View from the Chair

Label Pride

3D Corrugated



New Dimensions in Flexo

“We wanted to find a forum to showcase a new plate technology that solves some common problems that every flexo printer has when working with corrugated board,” said Chris Green, general manager of PRPflexo. To accomplish this, Green sent a team down to Clemson University (Clemson, SC) to hook up with Kern Cox. “We can’t knock on every door, but we can prove positive impact on every printer that utilizes these plates.”

But the crew didn’t want to put together a boring little print run using the same tired old imagery. They wanted to take things in a new direction. The technology Green and his team were showcasing was a digital, flat-topped dot. They wanted to demonstrate how this new dot shape can create a new dimension in flexographic printing. So they put together a series of images that seemed to jump off the page—almost literally.

GET YOUR SPECS

The design that the PRPflexo team printed at Clemson included a 3-D anaglyph image of halftone dots. When viewed with red/cyan glasses, the raised dots appear to pop off the printed board and stand about 3 in. high. “Since this technology is new, we

wanted the promo piece to have a novel presentation,” said Dave Price, sales manager at PRPflexo. “In addition to the 3-D image, we utilized humor and anecdotal references to highlight the benefits of the plate technology. Our cartoon image of Professor Ned, our real-life research director, demonstrated not only technical information, but a sense that we like what we do, and we are not afraid of having some fun along the way.”

“The pressrun itself was a normal corrugated pressrun in the sense that the setting up and running of the job was independent of the plate type or dot structure on the plate,” said Cox. “The pressmanship is the same no matter what the image on the printing plates happened to be, which is a good thing. We would not



Visitors from Masco Label, left to right, in the back row: Marsha Salvage and Mike Horn. Front row: Don Orr, Darren Hill, Cathy Carr, Shirley Ford, Susie Ramey, Jodi Johnson, and Jerry Seifert (PRPflexo sales rep).

have wanted to see any difference in this respect from the two plate types."

Designers went out of their way to include challenging imagery, so that the difference between conventional analog plates and the new technology were evident. "All the images were created internally," said Price. "We included a picture of our GM's daughter, some of a Mac operator's daughter. There's also a photo of the Butler University campus, an illustration created by our staff, and one a photo shoot of food done with a consumer-grade digital camera."

Price insisted that very little was done on the prepress side to make the job easier to print. "We allowed for breakout to emphasize the softness of transitions, and in other cases, we did not purify the separations as would normally be done. It should be noted that there were no cutback curves applied to any of the images."

This made for some very difficult registration issues, according to Cox. However, he insisted that this is not unusual.

"Registration is the most notable attribute of the flexographic printing process, especially with post-print corrugated," he said. "In running this job, we had to find the ideal window of plate-to-substrate impressions which would allow all the graphic elements to fall in line with one another and ensure register held throughout the run."

The whole piece was laid out with conventional analog plates on the left side of the red dotted line, and the new plate technology on the right side. There were also many direct-comparison elements included, as well as gray scales, vignettes, and fine type.

Still, the most prominent part of the design is the 3-D image—something never before done on corrugated board. "The 3-D elements were included to emphasize, in a big way, the dot profile created by our patent-pending process," said Price. "Many printers have not seen halftone dots in such detail, created by using a scanning-electron microscope, and we wanted to communicate the 'beauty' of this technology in a memorable way."

Incorporating the image held its own set of challenges. "The inclusion of the 3-D photo created the kind of challenge

Protect
Your Gearless
Press Investment



Flimsy.

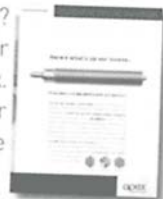
(Are foam-based anilox sleeves crushing your margins?)

What's up your sleeve? Once you see what's up *their* sleeve — spongy foam material, ink contamination, corrosion — you'll want to slip into the best-made anilox sleeves you can buy: Apex UltraQuick sleeves.

Why? Apex customers are raving about our **Tru-Ring**™ rigid-center ring system and our **InkSafe**™ impermeable endcaps. Coupled with our **UltraCell**® laser engravings, you'll get the highest ink-release in the industry — and the absolute lowest inside *and* outside T.I.R. With *zero bounce*. How? Only Apex makes both the sleeves *and* the engravings from the ground up. **And that's why Apex is the**

only sleeve with a three-year warranty.

So ask yourself: do you really want your next anilox sleeve made out of foam? Wouldn't you prefer precision-machined lightweight aluminum? Nobody rolls up their sleeves for you like Apex. Let us prove it: call or write today for your free brochure or quote.



Call **866-APEX-USA**

info@apexnorthamerica.com

www.apex-groupofcompanies.com

65 Washington Street · Donora, PA 15033

apex
Group of companies

THE WORLD'S LARGEST ANILOX MAKER.



A typical photopolymer plate was used for the left side of the image, and clearly shows fluting. The right side used the flat-topped dot technology.

that our Mac operators enjoy immensely," said Price. "Though we have not created such images previously, we determined the feasibility first, and then learned how to combine two images taken at slightly different viewing perspectives into a single anaglyph image."

LEARNING EXPERIENCE

The crew from PRPflexo chose Clemson for its print trial for a number of reasons. "Clemson has an excellent reputation," said Price. "Its staff has interest in leading edge technology and we value their unbiased opinions."

As the job ran, Kubes and Price participated by loading board, checking ink pH, and helping to inspect the prints. "We even helped clean the press after the run," said Price. Kern also explained details of the press operation during the run, including settings, machine capabilities, and other specifics that he shares with students—a real education for the PRPflexo crew as a plus of the project.

Kubes found the experience most interesting. "Personally, I learned a great deal during the running of this trial at Clemson," he said. "My previous experience included sheetfed litho and flexo preprint, but I never had the opportunity for hands-on experience running a direct-print corrugated flexo press. Managing a prepress operation that fed mounted sleeves to one of the

Ned Wier, David Price and Scott Kubes of PRPflexo.



TECHNOLOGIES & TECHNIQUES

world's largest preprint presses does not provide the knowledge required to feed sheets into a Bobst 160, or wash-up anilox rolls and chambers. It was a tremendous learning experience to see the differences between the needs and requirements of each type of printing operation."

Kern proclaimed that he was honored that PRPflexo chose Clemson for the trial, and went on to say that the experiment with 3-D imagery has piqued the interest of his students. "On first impression, the large center image looks out of register, but once the 3-D glasses are on, the image comes off the paper as if you are in a lunar landscape. Several students have gotten interested in anaglyphs since seeing this piece, so we can only wait to see what ideas this leads them to."

SATISFACTION

Naturally, everyone involved with the print trial was thrilled with the results. "The 3-D image gets customers' attention, but the detail and clarity of the print, and the fun-facts inserts keep it," said Price.

Kubes stated that the lighthearted approach to the project makes for a good sales tool, and that the 3-D effects really draw people to the print. "Every individual has made positive comments concerning the inclusion of the 3-D effect within the graphic. They have all stated it drives home our point of showing the unique properties of this patent-pending process. Including the 3-D affect will imprint this dot profile in their memory better than

any 2-D photograph could have accomplished."

"The final print turned out very nice and offers a side-by-side visual comparison of analog and digital corrugated plates," said Cox. "We have all heard how digital plates have rounded dots and can amplify the fluting effects so this was a creative way to demonstrate how the digital technology has advanced to give a flat-topped dot."

Price made a note to thank Cox and Clemson University for their assistance. "The bottom line is that the new plate prints are amazing. Fluting is minimized, dot gain dramatically reduced, and the detail is incredible." ■

MACHINERY & MATERIALS

Press: Bobst 160

Run Speed: 3,600 sheets per hour

Run Length: 500 sheets

Colors: CMYK, dark to light.

Substrate:

Kemi board in e and b-flute

Anilox: 700lpi/2.8bcm in the black, and 500lpi/3.0bcm in CMY stations

Plates: DuPont DPC (for the Digital ExSpect), and TDR (for the conventional analog)

Stickyback:

.125 in. on .060 R-bak carrier sheets, for a total target undercut of .1831.



120 Fredette St.
Gardner, MA 01440
978-632-7100
www.360imaginginc.com
Dan Heller
National Sales Manager
330-607-1025

"Yes, we do ITR sleeves..."



With or without an integrated cushion layer

We can also fulfill all of your Flexo Prepress Needs.

- Digital Solvent Plates.
- Cyrel FAST Plates
- Kodak Approval Proofs
- Full layout and trapping

Visit us at the FTA in Dallas to discuss the impact ITR can have on your business.

INFO*FLEX 2008 Booth 263

360 Imaging provides the most diverse image carrier offerings in Flexo prepress. As well as extensive knowledge and experience to support our customers. We also provide a full service prepress department with Kodak Proofs, Digital Solvent and Digital Cyrel FAST® Polymer Flat Plates. If you need it we can do it!

The One Stop Shop For All Your Flexo Prepress Needs