

Exopack®

Customer Testimonial

Exopack is a converter of packaging and film materials headquartered in Spartanburg, South Carolina. With 15 packaging and three coatings facilities strategically positioned throughout the United States, the United Kingdom, and China, Exopack provides its customers a broad product offering of rollstock, pre-made packages, and a wide array of substrates and engineered coatings. The company also offers internal prepress capabilities, including digital plate imaging.

Exopack touts its “continued commitment to state-of-the-art processes and technologies.” We sat down with two people who support and evaluate new technologies to the Exopack supply chain, Jonas Scruggs, Prepress Technical Representative; and Jared Hinkle, Corporate Ink Manager. We asked Scruggs and Hinkle to tell us more about their decision to invest in the LUX® technology from MacDermid and what they have learned about LUX since they introduced it to their workflow in early 2011.

“The introduction of flat-top dots has been a huge leap for the industry the last 24 months,” said Scruggs. While others have extolled the virtues of HD printing, Scruggs maintains that complementing HD with LUX flat-top dots is what really makes higher line screen practical. “In my opinion, there is not a big benefit to going strictly HD – you need to add flat-top. HD might enable you to increase line screen, but then you may encounter print issues throughout the run, such as dirty print. Then, you’re cleaning plates more and your down time increases. Traditionally, you wouldn’t even talk about 150 lpi in the wide-web market. Now with flat-top dot, we’re going to higher line screens with minimal issues,” said Scruggs.

ON CONSISTENCY

We asked Scruggs and Hinkle what they felt was the single biggest benefit with the addition of LUX, and they both agreed that the ability to print consistently throughout a press run has provided them with huge business advantages. “We’ve looked at it from roll to roll to roll, and LUX flat-top is more consistent than what we’ve seen in the past.” Scruggs commented, “LUX has helped us with a lot of the CPG-driven print quality programs that we participate in.”

Hinkle added, “I can easily look at roll number 1 through roll number 20 and see the print consistency. When you’re being measured under a customer print quality program, consistency is very important. As a printer, I have to be able to maximize our tool selection that allows the first shift, second shift, and third shift to hit our consistency mark. LUX complements our tool selection to hit that mark, with less print impression.”

He continued, “Everybody used to cringe when they heard about a print quality program because they assumed it was going to result in a lot of down time to get everything consistent. Now, when it’s done right with LUX and HD, we are capable of running more

product under print quality programs than we could previously. We're able to get consistent print and consistent lay down without stopping the press."

ON SPEED

Another advantage that LUX provides is the ability to run presses at high speeds without negative print results, effectively increasing productivity. Hinkle noted, "We were really encouraged that there was no speed detriment. That aspect of the LUX technology has had huge significance. It's critical in our business to be able to keep our press speeds up."

ON COLOR GAMUT & TONAL RANGE

The concept of increased color gamut has become a hot topic in the flexo printing industry. LUX enables printers to expand their color gamut. Scruggs explains how: "You can print a very fine highlight dot with regular digital HD, but many times you're going to fight to keep that dot from drying out and printing dirty in the highlight areas. What we've seen is that if we use LUX, we may print 1-2% heavier in the highlights and may print my 2% dots at 6 or 8, but in the shadow region, we can carry a smoother ink lay and get a better visual in the shadows using LUX and MicroCell. With the solid screening techniques in the market today, the inks lay smoother, so therefore our tonal range is extended in the shadow region. We are essentially extending the gamut, by extending the tonal range, but we're doing it in the shadow end and not so much the highlight end."

Scruggs went on to add, "Traditionally with flexo, you start mottling up and ink doesn't lay well in the solids. Now with LUX flat-top, solids lay very smooth in the shadow areas. You don't get a big density increases numerically, but from a visual standpoint, it's like night and day."

Hinkle shared his thoughts on how flat-top dots have created the need for different color standards: "When we are reading the LABCH values, all of a sudden the chroma to our color hue is positive and they're saying 'We need to dirty that up'. No, you don't need to dirty that up, you need to change your color standard. Now you're maintaining a different color gamut. Some customers have a color standard for regular HD, and then a separate color standard for HD with flat-top. We had to do that because we're being judged by our color space, and you can't ask an operator to tone a mono-pigmented ink and expect to get consistency"

ON "TYPE HIGH" & THE BUMP CURVE

Scruggs observed that the 'type high' nature of a LUX-processed plate enables better consistency. He noted, "A regular digital plate has some wave to it, some low spots, some high spots. These differences are very minute, but they're there. With flat-top, everything comes up to the same level, and you take that variability out of it. If you look at the way a LUX plate is made, again, flat-top is going to bring everything to the top. Everything is as flat as this table,"

Hinkle and Scruggs also appreciate the ability of LUX to essentially eliminate the bump curve. "If I'm utilizing flat-top, I know exactly what the dot should be on the plate. If I'm 1% in the files, I'm going to be 1% in that plate. It takes the guesswork out of that part of it," said Scruggs.

Hinkle added, "We are able to get that 1% dot using current anilox selections. So now when someone asks for 150-line artwork, we don't have to retool, and go out and buy new aniloxes. There is such a uniform impression using flat-top, we are able to put a kiss touch on it; then our operators are able to register it in and let it rip."

ON UPPING THEIR GAME

Exopack shared with us how they had struggled with one particular print job that had black ink printed over white on shrink wrap. "In the past, we've always struggled with the black background. With LUX and Microcell, when it shrinks down, it's really allows for a nice, smooth-looking black. We can now do this with a one-color black, whereas in the past we've had to use two blacks. So we've eliminated an ink from this job and reduced cost from the process," said Scruggs.

"We've shown LUX to several large CPG's and their response has been, 'This is where we're going. We're going HD and LUX flat-top.' It's almost like it's happening overnight."

To learn more about Exopack, visit www.exopack.com

To learn more about the LUX Process, contact your local MacDermid representative or visit www.macdermid.com/printing.