How to Make DIRECT PRINT CORRUGATED LOOK GOOD

by James Chesley, Pamarco

There has been a recent increase in companies returning to or making an original investment in direct, high-graphics corrugated printing. Why this draw to something that hasn't lived up to the capabilities of label printing in the past? In a nutshell: with technology today, there are ways of pushing the limits in direct print that the industry has never seen before. In some cases, direct corrugated print quality nearly replicates that of preprint, but it often does so at a reduced cost. By following a disciplined approach, direct print may result in new clients and increased profits.

Among these steps, there are two vital factors that stand out above the rest: ink requirements and anilox roll engraving. It is the handling of these two things that will make or break the ability of your process to successfully and consistently print on corrugated directly. We know that each part of the print process has an effect on the others. Some parts, however, alter the outcome quality much more noticeably. In my experience, there are more problems stemming from poor choices in the areas of ink and anilox than any other part of the process. The opposite is true as well. Good choices in in these two factors can bring about great capabilities and really push the envelope of what direct print can do.

It begins with what is being printed; the graphic detail and the board type play a significant role in making decisions. With the choice of what to print, there will be a correlating ink sweet spot to ascertain. A proof is necessary to start the process, so a prototype will be printed out digitally. The ultimate goal is going out to the press and hitting those color targets from the proof, but finding out what works best isn't always easy. That's where we come in.

Once the end goal of what to print has been decided, the next step is finding out what plates are being used. Then it's time for anilox specifications. Our anilox recommendations are based on collections of data over multiple press runs at multiple locations, so we have high confidence that our suggestions will get us on the mark. We can then finely-tune based on your specific applications. By knowing the substrate, we are able to target the proper engraving for the anilox roll, providing the BCM and LPI necessary for the job that you want to print.

When you have the correct volume established for what you're trying to print, and we deliver an accurate LPI, it's going to distribute the correct amount of ink for the substrate.

That brings us to why ink is so important. Poor ink, with a lot of fillers, makes it really hard to hit the right density – it's difficult to be consistent when the ink has to be overly adjusted to keep the job running. Good ink is more reliable. The significance of consistent ink is seen in its impact on density.

While essential in all printing, proper density is absolutely critical in direct corrugated. The right density helps get the full spectrum of the print, and the right BCM helps keep the colors the way that they should be. As you start on this direct print journey, establishing a team of suppliers to work with will increase your level of success and maximize the overall print results. Who is on that team is up to you, but, at a minimum, your anilox supplier and ink supplier should be on board and working together to deliver the proper ink lay for the job at hand.

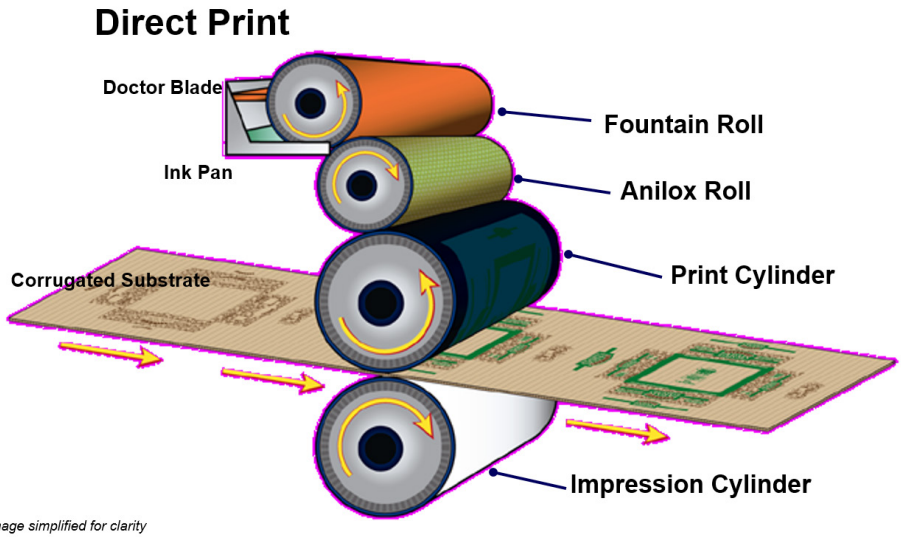
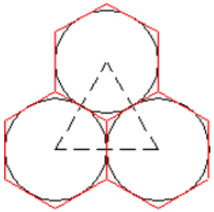


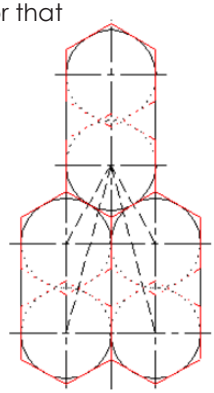
Image simplified for clarity

It is imperative that you choose a supplier that you have confidence in, one that is known for consistency and quality. Materials and services play a big role in the cost of an anilox. Just like ink, there are many versions of rolls. Some converters will go for the lowest price-point supplier every time and not realize that they are changing their rolls twice as often. Maybe my roll is a little more up front, but that roll will still be performing five years from now. Lasting value is provided by attention to detail, re-manufacturing to OEM specifications, and the use of quality raw materials. There is consistency in engravings, and you should expect that if you ask for something today, and then ask for an identical replacement roll years from now, you'll get the same roll built to the same specifications. And that's critical because a one-point difference in BCM is going to make a huge difference in the print.

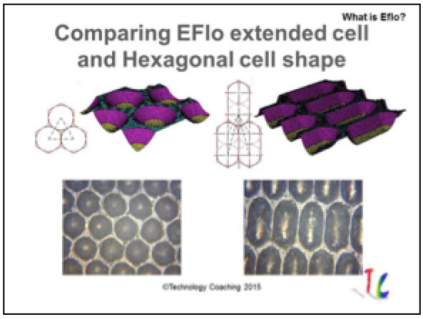
Variance in the volumes of anilox roll is so important. You have to choose the right anilox roll – one that is going to put down the precise amount of ink required for the job. It is necessary to achieve the proper ink density so that the colors will match those of the proof. With the right anilox roll, and the volume specified for that print plate, it is going to lay down the volume needed for that job, which will match the needed density. Keep in mind that once you have the correct anilox specifications, you will need to maintain that volume consistently over time. That's when roll maintenance becomes critical.

In the end, everyone wants to print better. But that does not always mean preprint or offset labels. With the right choices, there are great advantages to high-graphic, direct print corrugated. Take the steps to find the proper anilox roll engraving by matching the volume and the correct LPI to the printing plate and the substrate type. Work with a dependable ink company and have your inks dialed in to match the required density. Focus on the most important details to give yourself the best chance of consistently getting the box that you want. First appeared in Flexo Magazine.





CONVENTIONAL EXTENDED



EXSTENDED CELL TECH PROVIDES INK CONTROL AND INK TRANSFER BENEFITS