THE FLIP SIDE

Adding a Dimension to Inkjet Printed Graphics
Exploring the potential of printing on textiles

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When asked about the opportunities in digital textile printing, I often relate the Chinese proverb that says “When testing the depths of a stream, don't use both feet.” There are great opportunities for inkjet printing on textiles but the products and systems are complex. The bottom line is that it’s important to know what you’re getting into.

For those involved in the printing of wide-format graphics, digital textile printing usually means textile-reinforced graphics, flags and banners. These so-called soft signage applications (we like the term promotional textiles) represent a market sector driven primarily by advertising and not by customized decoration, convenience or economics.

Last fall I delivered a presentation on the wide format graphics market for the Textile & Graphics Symposium at the IFAI Expo in Atlanta. I identified some ways that inkjet can benefit the markets for industrial fabrics. In discussing the future of industrial fabrics, Pat Hayes of Fabric Images, Elgin, Ill., described the IFAI membership as a diverse group of specialist suppliers providing products customized to specific applications. And although the printed graphics industry is about graphics and the textile industry is about producing textiles — now is an opportune time for these two markets to come together.

Of course I realize that there is *already* a market for digital printing of textiles, and that thousands of inkjet systems have been sold as dedicated textile printers. But when we consider textile printing as a whole, inkjet is still relatively tiny. In fact, digital printing of textiles captures only about 1 percent of global volume of printed textiles.

Doesn’t it seem bigger than that? Well, it is within the wide-format graphics market. Digital printing of wide format textiles captures more than 75 percent of the market for textile reinforced graphics (billboards, truck curtains, fabric graphic). But don’t forget that most of this today is printed on a substrate defined as a textile - scrim vinyl.

Still, some applications can be a natural fit for printing onto polyester, silk, nylon, and cotton blends. And these are the applications we know about and are applications that can benefit from a ‘softer’ look and lighter weight (lower shipping costs) compared to flexible plastics. Now I am not saying that printing banners and P.O.P. displays onto fabric isn’t interesting. It is, and the market will continue to grow. But taking a step back from the graphics market, I am saying considering the textile industry as a whole, the *opportunity* and *potential* are actually much bigger than that.

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One of the challenges with the inkjet printing is that there is the lack of standards. And this is very apparent in textile printing with inkjet. Shops that print onto fabric may use a hundred — or even several hundred — different types of fabric. Each fabric offers a unique look depending on the printer/ink combination with which it is paired. And as with the rest of wide-format inkjet graphics printing (onto vinyls, papers, rigid boards) there is no single universal textile inkjet printer that can do everything.

On the plus side digitally printed fabrics provide unique textures and added design flexibility as well as an element of contour shapes and depth not easily attainable with rigid boards, paper or flexible plastics. It's not easy. It requires not only an understanding of how to print on textile but also an understanding of structure and how to support these printed fabrics in the construction of the final product. But this is good news.

Inkjet printing of graphics on fabric is not a commodity market today. Production of these applications is not about shaving off cents per square foot but about providing added value to your customer. The opportunity here is in providing *value* to a unique product and not focusing on economies of scale. I am talking run lengths of one here.

The key is to understand that no single digital printing system is able to effectively produce graphics for all areas of textiles. Some units offer high resolution, small droplet sizes and the accompanying slow speeds. These may be well-suited for intricate designs on tightly woven fabrics such as silk, for trade show displays — applications to be viewed close-up. Other systems offering faster speeds (based on inkjet’s definition of fast, not that of the overall commercial textile printing industry) with lower resolutions and larger ink droplets, are perhaps better suited for larger-run fabric pole banner jobs. Each performs well in certain areas but not all.

Inkjet technology can open new markets, develop new applications creating additional sources of advertising and brand identity. The limit is only in the creativity of the market by adding value to digital printing products.

I believe it's going to be very big. Stay tuned.

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