PRIMED FOR PIGMENT

Digital printing using pigments keeps the trillion-dollar textile industry in suspense – but when does it take off? The key is to keep a close eye on business pragmatists, advises Helmuth Haas

Patience, according to oil tycoon Paul Getty, is the greatest business asset (although fluency in Arabic might have been equally important for becoming the richest man alive at the time). In digital printing though, patience seems to be an essential virtue.

Pigments and textiles have been in a love-hate relationship for decades – digital printing simply adding a new chapter to it. The operational benefit of using pigments for digital printing seems straightforward. Print reliability also meets the industry requirement and overall print results match the demands of many textile segments. Still, insiders keep a lookout for the mainstream market to adopt.

SPOONFLOWER – THE EARLY ADOPTER

Business pragmatists who are in the majority might not easily be thrilled by some new technology nor by a revolutionary vision. More important to them is reasonable risk management using a fair amount of unbiased data - and this took its time for digital pigment printing. Back in the early 2000s when the first digital pigment printers appeared, most of the textile pragmatists had their cautious approach affirmed. Even visionaries like Gart Davis from Spoonflower [an on-demand, digital printing company based in Berlin that prints custom fabric, wallpaper, and gift wrap] waited until 2013 to invest in an industrial roll-to-roll digital pigment printer. When Durst presented its highend pigment printer at ITMA 2015, everyone in the industry was closely watching Spoonflower, the most experienced early adopter. Much to the delight of Durst, Spoonflower finally placed the order in 2017.



Digital pigment printing on polyester fabric without primer (left) and with CHT's Tubijet primer (right)

E-COMMERCE BEING THE BEACHHEAD

In short, a beachhead strategy focuses on winning one market segment before moving on to the next. The significance of Spoonflower ordering two more of these high-end printers in 2019 cannot be emphasised enough. Durst not only seems to have a viable pigment printer for the e-commerce business but there was also a crucial difference in primer application technology: instead of jetting the primer, Durst decided to use established padding technology. While a padder is a standard equipment for every textile mill, it meant that e-commerce businesses like Spoonflower had to ask their fabric supplier to perform this additional step up front. Like going from offset paper to digital paper, this required some effort, but the overall performance gain seemed to justify it.

THE NEW LOVE-HATE RELATIONSHIP OF INKJET

You won't find many people who have an unconditional love for primers – the inkjet precoat needed to show an impressive performance gain such as enhancing colour or improving wash-fastness of the textile. What the primer technology is capable of is



Digital pigment printing on polyester/cotton fabrics without primer (left) and with Tubijet primer from CHT (right)

illustrated in this article. Each of the prints opposite were made on the same fabric with the same profile. The only difference is that the sharper one was coated with the Tubijet primer from CHT prior to printing. Back in 2015 when Durst and CHT developed a complete primer portfolio for various substrates there was considerable doubt over whether e-commerce would

"When Durst presented its high-end pigment printer at ITMA 2015, everyone in the industry was closely watching"

adopt the process, however this additional step up front seems to pose no obstacle to e-commerce businesses nowadays. Even without strong textile heritage, e-commerce businesses like Probo, Lillestoff or CottonBee were able to implement this step with their existing fabric suppliers fairly quickly.

ARE WE THERE YET?

Repeated machine orders from a visionary company like Spoonflower might prove that pigment is a suitable technology for the e-commerce niche. Assuming that this is the kick-off for the rest of the vast textile industry to adopt though seems farfetched. As with any other technology hype the industry first has to go through various cycles. Being currently 'on the slope of enlightenment' might be a fair assessment since the early adopters seem to be satisfied and more businesses start to benefit from this technology.

CROSSING THE CHASM

Surprisingly, Brazil might be the place where we see some of the first textile companies crossing the chasm. This is even more astounding when looking at the economic challenges Brazil had to face in the past decade. Using the framework of Geoffrey Moore [American organisational theorist, management consultant and author, known for his work 'Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers'], we might interpret the investment of Brazilian textile giant Döhler in a high-speed pigment printer at the end of 2019 as one of the crucial signals we all have been waiting for. If there is anything that outsiders and suppliers can

attribute to this 140-year-old company then it is their business pragmatism – firm but fair. On top of that, managing capital expense wisely in any vertically integrated textile mill with its vast machinery is even more crucial for its cash flow. It is fair to say that such a company minds the gap – and makes sure to shed light on all the uncertainties that come with a new technology.

THE BLUEPRINT TO DÖHLER'S SUCCESS

Home textiles specialist Döhler has in-depth knowledge of successfully producing cotton/polyester blends using conventional technology. Even though, printing pigments digitally seems like the obvious next step, Döhler took it to a whole new level. Starting at fibre selection, weaving patterns, bleaching conditions as well as primer recipes, print profile adjustment and curing conditions – everything in production was looked at.

WHAT MADE THE DIFFERENCE?

The most tragic thing for digital printing is when it is simply used for replacing rotary printing. Döhler is a prime example for a company that did exactly the opposite.. It went the crucial extra mile, got its own design team onboard and developed completely new products to offer the Brazilian interior decoration community what this industry had always dreamed of: creativity, agility, choice, responsiveness and quality at drastically reduced minimum order quantities and at a reasonable price point.

AGILITY – THE ENGINE OF FUTURE GROWTH

Looking at pigment primer sales and customer feedback we see that the current Coronavirus pandemic has not slowed down digital printing at all. By contrast, we see signs of acceleration and more attention to a digital mindset. Even though costs for ink, substrate, primer and printer will always count, the past months have dramatically shown us that there is more to the story.

"You won't find many people who have an unconditional love for primers"

In an unpredictable future the ability to adjust daily to ever-changing market demands is key to success. Printing only what you either have already sold or will sell the next day became reality – both for Spoonflower and Döhler. Both of them, the visionary and the pragmatist, serve as beautiful examples of agility to address the uncertainty of our times – by using digital print technology to their advantage.

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