

The American Test

By the time Teksib first forayed into printing hard-to-handle substrates for shoe-manufacturer, Birkenstock, Bradatsch 's fledgling business had already mastered textiles, labels for audio tapes and posters. At the time, Birkenstock was having leather printed in Italy, but was keen to get the printing to last longer in pristine condition. In particular, the company introduced what they termed the American Test, one that would twist and turn a shoe 100,000 times to put the quality of print through its paces and check for cracking in the ink. Located just a few kilometres from a pair of Birkenstock factories, Teksib was in an ideal position to pitch for the business.

Teksib's breakthrough came from a chance visit from an ink manufacturer, Sericol. *"Initially we were talking about screen printing inks, but Birkenstock was an important project, so we discussed printing on leather and other shoe materials. Sericol introduced me to an ink range called Nylotex."*

Nylotex NX is a one- or two-part screen printing ink formulated primarily for nylon and other synthetic substrates. Bradatsch experimented for many weeks with Nylotex combined with catalysts and solvents to get the quality he wanted. *"It was hard work, but the results were excellent. We were able to meet all of Birkenstock's specifications and conditions."*

The contract to supply Birkenstock ran for several years, which considerably boosted the company's reputation as well as revenues. The workload amounted to printing six thousand, 50cm by 50cm items in four colours each month. At one point the deal represented a quarter of Teksib's turnover.

Eventually, Birkenstock opted to acquire a screen press and brought its shoe printing in house. But the experience taught Teksib an important lesson: there are customers for the printer who is prepared to invest in perfecting the techniques of printing on difficult substrates. And the Birkenstock link did not die out entirely. Teksib printed the shoes celebrating the 2000 Olympics in Australia.

Overnight success

“Of course, we’re proud of all our work. If something isn’t exactly right, we print it again. But the projects that stand out are those that are technically difficult,” says Bradatsch.

In 2005 Teksib was engaged by Stuttgart-based department store Breuninger to print and fit a promotional wrap to a three-sided frame built into the front of the store. Size was not so much the problem – the PVC mesh is 65m by 10.4m – as the precision demanded by Breuninger. The wrap had to fit exactly and printed elements such as logos had to appear in an exact place. It was a challenge that baffled many would-be suppliers.

Bradatsch explains: *“The problem is that substrate that size will stretch and flex a good deal. So we had to calculate very precisely how the mesh would behave when it was mounted and adjust the print layout so that everything ended up exactly where the designer wanted it.”*

The design changes every six weeks and mounting the wrap is a special exercise in itself. Because of the city-centre location, work has to be carried out at night under artificial light, using a crane and sealing off the street. The logistics dictate that when the date is fixed in advance, the changeover has to take place come rain, wind or snow. In the morning when Stuttgart comes to work, all that must remain is the spectacular new façade.

Perhaps the most unusual substrate Teksib prints on is carpet. One recent job for Michelin involved printing a 41m by 41m Monopoly board that could be fitted in one promotion venue, then lifted and relocated to a different city. With carpet, the challenge is posed by the weight and elasticity of the substrate. *“You have to maintain a constant tension on the carpet,”* explains Bradatsch. *“Towards the end of the reel, it is much lighter, but you have the same weight of carpet trying to pull it through. If you don’t get it right, the printing gets distorted. You need to use an excellent printer.”*

First in Germany

The current flagship of Teksib's machine park is the Océ-distributed Gandhi Jeti 5000, the first of its type to be installed in Germany. The company has bought and operated a succession of presses, starting with an electrostatic Arizona 130 in the early days – again the first in the country – before moving to digital technology. Teksib increased the width, resolution and speed of print over time. The company chose Mimaki JV3 solvent-based machines, methodically building up customer demand for the wider formats to ensure the investment in 1.60m and 2.50m formats started earning their living as soon as possible.

Bradatsch recalls: *“Customers were asking us to produce ever wider print. We could supply it by welding narrower pieces together, but it would always be difficult to match the price of the full size print. So we invested in larger format printers and tried to build demand as fast as we could.”*

The type of customer changed with wider formats. Buyers for 1.3m print were regular commercial customers, but Teksib found itself offering wide format print to advertising agencies, which are ever more demanding in terms of quality and price.

“The capability of wider format has a huge bearing on how you work,” says Bradatsch. *“We once printed a ten by thirty metre building wrap on a 1.3m Arizona. We really had to sit down and figure out the costs in detail, then print and weld all the sections together. It took weeks. Now we can do the same job in a couple of hours in two five-metre passes.”*

The choice of Gandhi Jeti 5000 has proved successful for Teksib. In fact, the company is buying a second machine to handle the jump in demand, and extending the capacity of the company's premises – appropriately, a converted former carpet factory. The only difference this time is that the new machine will be set up to use Fujifilm Sericol Color+ solvent based inks from the outset.

Bradatsch explains: *“We've worked with Sericol inks for a long time. We started with Texopaque OP when we first began printing textiles, followed by Nylotex NX ink on Birkenstock's shoes. When we were looking for ink for the Gandhi Jeti – there was a hold-up in supply – it was natural to approach Sericol. We knew they had designed a Color+ range for other makes of printer that use the same Spectra print-heads.”*

Color+ is a range of solvent-based piezo inks specifically developed for wide format digital printers.

Color+ inks enjoy a reputation of producing brilliant colours with outstanding light-fastness and adhesion to a wide range of uncoated materials. Sericol uses a proprietary Micro-V dispersion technique in the production of Color+ which makes pigments stay in solution longer than other solvent based inks. From the printer operator's point of view, it eliminates the need to shake the ink or adjust the viscosity before using it.

"We had an important project for a customer, with little time to do the conversion," says Bradatsch. So we tested the cyan first and it work well, the images were sharper with better contrast, so we loaded all the other colours. Within a week we had converted the machine to run Color+ inks. And a few weeks later we had the Sericol technician in to complete the colour profiling. For the new Gandi, we will have it installed already set up and profiled for Color+."

Esprit de corps

Being prepared is important to Teksib. A bespoke job-costing computer system – a significant investment of time for a small company – allows the company to quote on complex print jobs within minutes, much faster than most competitors. It also helps that all the employees are thoroughly familiar with the business and its customers. Bradatsch ascribes much of Teksib's success to the close-knit, family atmosphere in the business and many of the staff have worked for Teksib throughout the company's progress.

The company has benefited from taking a sideways look at the world. Instead of looking ahead in a single direction, the company has hunted for new applications and in doing so has carved a niche for itself as being especially capable with demanding substrates. For example, Bradatsch sees the company expanding rapidly in the field of exhibitions, particularly working with light textile substrates such as Solvotex, as well as working with suppliers to explore the possibilities with heavier carpet materials.

"We're a small company, but we're extremely good at what we do," concludes Bradatsch. "The more we push out the envelope of what is possible, the more our reputation will grow in Germany and, perhaps in the future, abroad."

Teksib has come a long way in a short time. The company's early experience of working with a wide variety of materials – from table cloths to cassette tapes – whetted its appetite for difficult and unusual printing jobs.

"I like it when customers say they have something in mind that might be too difficult," says Bradatsch.

"It appeals to the rebel in me."