

SCREEN TEST

Alan Buffington reflects on his screen printing career and explains how a well-made screen can be the starting point for many successful companies

Many screen printers start with the bare minimum of equipment. What is the first task? Learn to make a screen with an image. This first step is like magic for a beginner. How can a liquid coated onto fabric capture all this detail? After the screen is exposed, developed and allowed to dry, the screen is then attached to two door hinges or Jiffy Clamps and secured over a printing surface and soon the first prints are pulled. The emulsion may quickly break down since ink compatibility was not part of the purchasing criterion. Printing is done for as long as the screen can avoid breakdown.

For anyone at this stage, screen making will become a career-long effort to make better screens. Once the posters or shirts are dried/cured and are analysed and separated into good and bad prints, they are shown to family and friends. If the print was well accepted a sale or two may occur, and a young budding entrepreneur is born.

EARLY ADVENTURES IN PRINT

As one of my electives in high school I took an art class and enjoyed the creative process of screen printing and wound up printing hand bills for the school's open house. I found parents interested in grabbing one as a souvenir and found their admiration of a simple one colour print motivating. My parents were looking for a unique Christmas present and asked my art teacher for ideas and she directed them to a screen printing supplier in Los Angeles. I remember getting an 18xx multi-filament pre-stretched screen along with a pair of Jiffy clamps, a roll of hand cut lacquer film and lacquer thinner to adhere it to the screen. My friends were showing off their bikes or

surfboards and they were looking at me wondering what I had done wrong that year to deserve these industrial supplies. It took almost half of the roll of film to master the adhering process and several weeks of trial and error to achieve a durable screen.

First I had to master cutting the lacquer film with an x-acto blade. Then learn how to peel off the areas to be printed and leave enough film to cover the screen. The art I chose was a composition of two race cars for the Indianapolis 500 in navy ink printed on red and light green charcoal paper my friend and I had found at the local art store. I enlisted my friend's help to carry the freshly printed posters and place them all over the living room of my parent's house to dry.

We printed 50 posters before the screen broke down and made a horrible mess of my mother's kitchen. We opened the windows and doors to air out the solvent smell and admired our efforts while learning what solvents cleaned the ink off the floor.

"What are we going to do with all of these?" my friend asked hoping his ordeal was over.

"Let's head to the mall and sell them!" I replied, watching his demeanour go from relief to questioning the friendship.

We walked around our local mall barking out, "Five dollars, five dollars, get your Indy 500 posters!" and after several hours of learning how to accept "No", we wound up selling most of them. What we couldn't get



Thanks to Colors Inc for this photo of their first screen



Beauty and the Beast poster printed by Bobcat in 1992



Vans logo designed by author in 1974, approximately (Copyright Vans: VF Corporation)



The Vans 'Off the Wall' logo – designed by author in 1974 and shown on footwear for the Space Station (Copyright Vans: VF Corporation)

over was that we had close to 200 dollars in our pockets, which in 1968 was a substantial amount of money for two teenagers. We were hooked on screen printing. We went out and bought more mesh and rope to stretch on old wooden grooved frames; more hand-cut lacquer film and made more money that summer, all off of one 18xx screen.

GRADUATING TO BETTER THINGS

It amazed us how that screen could be so valuable for our teenage lifestyle. Eventually the 18xx ripped, and we went off to different colleges. In my dorm I found screen printing to be quite useful again to print air dry inks on white JC Penney t-shirts we bought for our dorm floor shirt. Soon other floors ordered. I had discovered screen printing emulsion and used a sunlamp to expose it with in my room. I waited until late at night and lined the edges of our

'We printed 50 posters before the screen broke down and made a horrible mess of my mother's kitchen'

hallway with the printed shirts, using the same Jiffy Clamp jig set up from high school. The dorm and team shirts earnings allowed me a small income for skiing, concerts and dates and an occasional flight back to Southern California for a winter surf session on homesick weekends when the surf was up and the winds offshore.

I have a client who was smart enough to save his first screen in business. Notice the corrugated staples of metal at the corners used to hold the home made frame together. This was Colors Inc.'s first job and the company is still located in Santa Ana California printing exceptional art. Like my screen he used multi filament mesh (the only kind available at the time) and two pieces of capillary film. He turned this into a three-colour job by printing sections of the design separately. All air-dried inks laid out for hours to dry. Both of us graduated to better mesh and emulsions and

mortise and tenon wood frame bars, #5 cotton cord, staple tape, and stretched tighter, stronger screens and watched our businesses grow from one screen to hundreds.

SURF 'N SKATE

Eventually I got married, and needed a career as well as needing a second job to support my family. I started a small shop called Morning Sun Shirt Co in Costa Mesa with one of my co-workers from my night job working for the City of Newport Beach. Our first big client was Van's tennis shoes. I designed the Vans logo and the 'Off the wall' skateboard print and both were huge hits in 1973–1974. I walk by my local Van's store and I am amazed at how long the original art cut in Rubylith has lasted for the company, and I have seen the shirts in Europe, Central America and on any young skateboarder. It's now in space, thanks to Vans/VF Corporation supplying shoes for the Space Station.

All one colour work; no base plates; on homemade wooden three-colour table top 'flip flop' hand presses. Our growth was exponential. We printed for many local surf shops, Russell Surfboards, Hannifin, Haydu Kneeboards, as well as many construction companies and bars. The company was sold so my partner and I could move and was continued by the new owner, Kawii, who really built Morning Sun into the print powerhouse it became in Southern California while printing for Billabong and Nike and many others in an excellent 8-auto shop he built in Garden Grove that has since been sold.

BECOMING MERCHANTISERS

I started another company called Super Prints that printed for local surf shops, 15th Surf Shop, local corporation events, boating manufacturers, sport fishing boats and many other business genres. Quite often on deliveries to 15th Street surf shop I would be

told Jack the owner was surfing, which would be at the surf break in front of his shop at 15th Street in Newport Beach. I'd grab my board and paddle out, catch a few waves and then drag him in to sign a check for the t-shirts – what a different world it was then!

I found the LA Fashion market was booming with screen printing needs and had more work than anyone could handle. My first test order from a future partner was 10,000 units of cut piece fleece. The job required water-based foil adhesive for a new foiling technique that had just been introduced and my screens weren't holding up. I began a search for an emulsion that could hold up to water-based inks in the effort to make a better screen.

My future partner and I realised he could get more work than my crew and I could handle. We formed a new company with investors to get into automated equipment. His connections

opened a floodgate of work in the first years from Disney, Mervyns, Pennys, Sears, and Walmart as we ventured into our own lines of clothing and became merchandisers.

The need for a very durable screen was now becoming a life and death issue for the company. Our schedules were tight; we couldn't have any delays to make on time delivery (the key to printing for the fashion industry). Our water-based and foil printing techniques needed better production yields. We improved our presses, exposure lights, and then discovered Aquasol TS – one of the first SBQ emulsions, made by Murakami, and still the highest resolving pure photopolymer textile emulsion available.

We did harden the screens, but more importantly we saw rejects go down, presses that printed non-stop with no screen breakdown, sharper print edges, finer halftones and I became a fan of Aquasol TS and bought mini drums of it.

QUALITY CONTROL

After writing this article it amazed me that a simple screen in high school could lead to a huge screen printing company that also discovered once again that a well-made screen made all the difference.

Now our industry is merging with digital printing which has the capability of taking over many facets of screen printing. For any young person starting out, the entry level cost of one screen, a squeegee and some ink is an easy door to open, while an automatic press with or without digital printing capability is out of reach for most. Digital printing is inevitable for many companies, from imaging screens directly, to outputting films, to a simple one shirt digital printer, but there are significant investments in these systems.

I look back at our cave man method for making Disney samples. Often the art was made using hand cut rubylith, pen and ink art on acetate with opaque India ink. Along the way we added a process camera, contact frame and an arc lamp and vacuum table to make an imaged screen. To sample, I would have a worker hold the screen while I pulled the squeegee to rush samples to our clients on a daily basis. No sample press, just line up the screen to previous prints and print all the colours along with puff ink and foil adhesive, and get good at it enough for the print to sell. All done with one screen at a time on a print table system of various sized shirt pallets.

One screen; that's all it takes whether you are a garage printer or a production powerhouse – the screen is the door by which many companies get started and succeed. ■

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All images supplied by Alan Buffington

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