The Wide, Wide World of… Fine Art!
Superwide Format Flatbeds Expand Artistic Potential

White Paper Series
I was trained as an oil painter and printmaker and grew up using photography to gather source material for paintings and Intaglio prints. My favorite source materials included architectural elements, discarded objects and landscapes. At the time, I would composite negatives in the darkroom, expose large sheets of photo paper designed for murals, and then mount them to panels for hand painting. But the introduction of the Macintosh and Photoshop changed all of that. As the world went increasingly digital, so did I. Digital tools made my artistic pursuits easier, and I soon began to see a convergence of painting and printmaking that I continue to explore today.

By the mid 1990s, I had entered the digital printing industry and had access to tools most people only dreamt about—high-resolution scanners, imaging software, high powered computers and monitors, and wide format printers were all available for my use. As I became more comfortable with these tools, I began to output small editions of my work using wide format inkjet printers with artist papers and good inks. With my knowledge of and admiration for the history and traditions of printmaking in mind, I categorized myself as a modern printmaker using the tools of my time. But I soon discovered something was missing for me. Intaglio and relief printmaking have a high degree of the handmade. Right or wrong, I needed to preserve this element in my work, and conventional wide format inkjet printing did not allow me to do that.

As I was coming to this realization, I also happened to be working for a manufacturer who was in the process of developing flatbed printers using UV curable inks or solvent. These devices would allow printing directly to large, thick substrates, and that was of great interest to me. So after a period of experimentation, I started to use the flatbed printer as a tool for printmaking. My goal was not to simply print images on a unique substrate, but to incorporate the printer into a process that would result in a small edition of prints made from the “digital negative,” but each unique in its own way due to the texture and markings of the underlying material. The result is a printmaking process I call StratoRelief.
StratoRelief—Printmaking in the Digital Age

The process begins with the composition of the image. This is where I initially exercise my creativity by digitally blending and manipulating photographic data to create the image. Next, I print a small version of the image for reference, and make an oil painting. The next step is to photograph or scan the painting and start the process of mixing and blending the original digital image and the scanned image of my painting to achieve the feeling I am after.

Once I have the final digital image and sizing has been decided, I make a copy and convert the image to grayscale. I refer to this as an underpainting. This image is printed to a plywood panel that has been cut to the final dimensions. The wood is selected for the way I envision the grain interacting with the final image. At the outset, I select enough wood for an edition of either five or ten pieces for a limited edition of the piece.

With the grayscale image printed on the surface of the wood, it is then time for the next step where creativity and spontaneity are the name of the game. The panel is carved, gouged, burned, and sandblasted to make a series of marks in low relief. While the exact relief characteristics are dependent on the image, the relief ranges from quite shallow and rolling to very coarse and deep. The edges are finished at the same time. Also, depending on the image, chemical stains might be applied to change the tone of the wood. The grain can be accentuated with dyes, bleaching, or dark toners. As an example, the lightest areas might remain a light maple or birch color, but the sky at the horizon might benefit from having that area of the wood be slightly lighter in tone than the surrounding area.

Once the texturing process is complete and all ink from the underpainting stage is removed, the panel is placed on the flatbed again, and the final color image is printed in loose registration. Wood finish is applied and the piece is numbered and signed.

The StratoRelief process allows me to work on the imagery in the digital darkroom, add an element of the handmade, and yet still work within the time-tested guidelines of traditional printmaking. And I can easily produce just one or two pieces to gauge interest before committing to the entire edition with associated inventory and storage concerns.

About UV Curable Superwide Format Printing

Superwide format flatbed printing technology, with printing widths of 10 feet, is what allows me this flexibility in applying my creative talents to this new area of StratoRelief art. These products have continued to improve in resolution, color gamut, and the durability of the images. Most allow printing directly to rigid substrates of all types, increasingly without requiring pre-treatment of those substrates.

More artists and fine art photographers are making use of superwide format flatbed printers, not only as a replacement for or complement to the work they are accustomed to doing on conventional wide format inkjet (up to 60””), but they are also venturing into new artistic territory by using unusual substrates that have texture, color and other attributes beyond traditional white canvas and fine art papers. In addition to my StratoRelief work on wood, artists are printing with UV curable inks on materials such as Polycarbonate, glass and even stone. One artist that paints images of city skylines is delighted to be able to transfer these to a Polycarbonate substrate. They are then hung in such a way that the ambient light enhances the image. Another artist paints eight-inch Cape Cod scenes, digitizes them, divides them into four and reproduces them on tumbled Italian marble using flatbed printing to make sets of four-inch coasters. The creative possibilities are literally unlimited!
In general, UV curable inks adhere to more substrates than aqueous and even solvent-based inks. With solvent printers, you can run roll stock like canvas up to 16 feet in width with repeatable results.

While the resolution for superwide format printers is still a bit below resolution achieved on the more familiar wide format (up to 60”) inkjet printers, they produce prints at speeds many times greater. They are also designed as production printers that can run 24 hours a day without problems. So for print service providers wishing to serve the fine art market, these printers also open up a wide range of opportunities.

As printer and ink technologies continue to evolve, the integration of digital and traditional art will only expand. Many artists who are training now are digital natives who have always had access to digital tools. It only makes sense that they will leverage those tools to stretch their creative abilities and develop new and innovative ways of expressing their art. I see superwide format as an important element of art in our times.

Kevin Currier joined VUTEk in 1997 as a prepress specialist and trainer. In 1999 he was made Manager of Application Engineering with responsibilities worldwide. Prior to that, he worked in a variety of prepress and digital imaging companies. Kevin has a BFA from the University of New Hampshire.