We first introduced the new GOLDEN Digital Grounds and Gel Topcoats w/UVLS to all of you in Just Paint 18. We knew that we were embarking on an exciting new journey, introducing you to innovative materials like you’d never see before. We were delighted, invigorated and challenged, all at the same time! Now that we've had a year to experiment with these materials, we thought the best way to demonstrate their unique benefits would be to share our first-hand experiences using them.

Realizing the Possibilities of Digital Transfers & Acrylics

By Dana Rice

For the last five years, in my role as Product Manager at Golden Artist Colors, I’ve had the opportunity to work with and explore an incredible range of materials. Just when I thought I was getting a handle on all the different ways these acrylic tools could be used, I had my eyes opened to a whole new direction through the possible combination of the fine art acrylics and digital transfer technology. Certainly an exciting new linking of real and virtual paint processes. I imagine there must have been this same sort of challenge and excitement when the first art photographers realized the possibilities of their new medium and the opening of a new fertile ground they could now explore. Finally over a hundred years later, we have created the possibility of joining these two worlds and the exploration has truly just begun.

Artists have been doing image transfers into acrylics for years, but what if there was a way to make this process cleaner, crisper and give the artist greater control over the marriage of image and acrylic? What if there was a way to move photographs onto surfaces that are totally unique? What if there was a way to re-introduce the idea of individual challenge and excitement when the first monotype, I began to see the advantages of using stored digital images and printing them with an inexpensive ink-jet printer.

I’ve always loved collage and my paintings are painted in a collage-like process, so the idea of creating personal collage elements was a natural. I was already using skins that I had created and applying them to my paintings.

Printing on paper was not a big draw for me, but the idea of making skins from acrylic was! I was in the midst of finishing my book (see back cover), so I was already thinking about “pushing” the boundaries of acrylic, and now, why not with skins? The timing couldn’t have been better!

After getting several simple skins through the printer and jamming the printer numerous times (without killing it), the fear receded and the fun began. I finally realized that if I ruined a printer, there was always another one at the nearest Staples®…it was just a tool that could be replaced easily.

Quick Overview of the How-To: Making Acrylic Skins

Surfaces for Skins…

My favorite surface for making skins on is a large piece of High Density Polyethylene, about ½ inch thick, 24” x 36”. I can make multiple skins at one time, and move the sheet from my work table to other tables for drying. I have several of these in use at all times. When teaching, I use plastic sheet protectors from the local office supply. These are made from a material that is perfect for making skins, but the best thing is that they are similar in size to standard print paper, 8 1/2” x 11”. This also allows for stacking the skins when dry as they won’t adhere to each other. Even cheaper, and easier to find are freezer paper, kitchen garbage bags and plastic sheeting from the hardware store.

I usually pour out the paint or gel that I continued on next page
am using directly on the plastic sheeting and use a tool to spread the paint. I use a palette knife, a large pastry knife, a window cleaner, or a large putty or plaster knife to level out the acrylic. I’m not keen on very flat surfaces, I like a bit of texture, so I don’t spend a lot of time fussing over how smooth the surface is.

When the skin is dry, I apply the preferred Digital Ground. I like the cheap sponge brush for application. When using the clear Digital Grounds: Digital Ground for Non-Porous Surfaces and the Digital Ground Clear (Gloss), I attach Post-it® notes to the skin to keep track of the number of layers I have applied since it is recommended that you apply two coats: the first application vertically, the second in a horizontal fashion. Since these Grounds are clear, it is almost impossible to see them. Several times I printed onto skins that I forgot to coat.

When the Ground is dry, I tape the skin to a “carrier sheet”. I use regular standard weight printer paper or a heavier cover stock for thinner skins. Trim any thick edges, or pieces that extend over the edge, and tape cleanly the leading edge and both sides. I line the tape up very carefully to match the edge of the paper.

I use Photoshop to manipulate my images, both photographs and digital images of my paints and paintings, mostly to increase contrast and color saturation. I insert that saved image into a Word Document. It is very simple to place the image in the center of the page, so that it will print where you want it to on the skin. I sometimes also adjust the printer options for paper selection and text or image choices. You’ll want to spend some time experimenting with all the features possible.

Photoshop.

Similar to many artists, I haven’t mastered Photoshop, and probably never will, but I have begun to explore it. Using my digital images of paintings and prints, I wanted to change the colors, saturation, and contrast for printing onto various skins, especially when printing onto a patterned or strongly tinted skin. The original image needed to shift in hue, values and saturation.

The printer that I am using for all my forays into printing is an Epson Stylus® NX400 All-in-One. Unless I wanted to completely take the printer apart, there is no simple way to get to the little tracking wheels inside, so I proceeded onward, and have had no problem.

Skin Ideas.

Not too long into the experimental printing phase, I got pretty excited to see how wild combinations of acrylic products might combine to create really unique skins.

Following are several options that I have explored.

MULTILAYER SKINS: After making several skins too thin and fragile, I began to add another layer to strengthen and thicken the skin. I was able to create especially beautiful skins when using the Iridescent and Interference products.

One skin began with a thin layer of GAC 800, then a wash of Iridescent Stainless Steel and Interference Violet, lightly brushed on, leaving clear spaces so that the skin remained somewhat translucent.

The first layer of this skin was Interference Blue painted out and scraped with a comb to create the basket weave. When dry, a layer of Manganese Blue Hue thinned with Polymer Medium for more transparency was applied. This skin began with dripped twirls of Interference Blue mixed into Clear Tar Gel. When dry, I scraped a layer of Micaceous Iron Oxide over the swirls to maximize the Interference effect (best over black)! One extra clear layer of GAC 800 to strengthen the skin was added. Then a loose and painterly application of the Digital Ground White (Matte) was applied on top.

GLASS BEAD GEL: For the purpose of creating skins, this product works best if it is kept as thin as possible. Because of the shape of the beads, it is especially beautiful if it’s tinted with a small amount of Interference color. The back side of the Glass Bead Gel will be very flat and easier to print on, but the “pebbled” side is also printable, offering a more speckled image!

This skin is Glass Bead Gel, tinted with Iridescent Pearl. The “top” pebbled side was coated with Digital Ground for Non-Porous Surfaces, then printed on with an image of a flower stem.

This skin is Glass Bead Gel mixed with Interference Oxide Green. One layer of Digital Ground for Non-Porous Surfaces was applied and when dry, the loose white brushstrokes of Digital Ground White (Matte)
was created. The digital image was originally a monoprint, the color and size were manipulated in Photoshop.

The Glass Bead Gel skin in this example is totally transparent, and was printed on the smooth side, with a layer of Digital Ground for Non-Porous Surfaces. I used an old black and white photo of ballerinas. On one side I washed off the black edges, but left the other side alone. This skin was glued with Soft Gel (Gloss) to a backing board created with: 1. Light Molding Paste, stained with the “balloons” of thinned Fluids. 2. A layer of Glass Bead Gel, when dry, repeats of the “balloons” and stains.

The Digital Ground is quite water sensitive, which can be a drawback, but also a great opportunity for manipulating the image. Water and a brush, or water with pointed color shapers can remove areas of the image. The image can then be “set” with a quick spray coat of the Archival Spray Varnish, so that the image can then be painted onto, or have gels applied without dragging the image. The benefit of using the Archival Spray Varnish is the added protection of the Ultraviolet Light Filters and Stabilizers (UVLS) present to protect the image. Another option is to very carefully apply Matte Medium to the surface of the image. Use a very soft brush and apply gently, so as not to resolubilize the Ground and the ink. (This will not add the UVLS protection, so that should be applied when the entire piece is finished.)


Another boon to the water sensitivity of the Digital Ground and the ink-jet inks is that they can be completely washed off an acrylic skin. Several times I have printed an image that didn’t work, and I was able to easily wash it off and save the skin to be printed on once more.

CRACKLE PASTE: Now this one was a brain teaser! First I put down a skin of Clear Tar Gel. When dry, I applied a layer of Crackle Paste and let it crack overnight. I very carefully washed a layer of thinned Fluids over the surface and let that dry. Lastly, I applied another layer of Clear Tar Gel, sandwiching the Crackle Paste between the layers. The resulting skin resembled alligator skin.

The image printed on this skin was originally one of my paintings. It was altered, or removed with water and a brush, removing sections, and then finished with several coats of Archival Spray Varnish.

This skin was made with Soft Gel (Gloss) for a completely transparent skin. The image was printed, and most of the background and foreground were removed with water. The communion dresses, hats, veils and paper cups were painted with Fluid Titanium White on the reverse side. When dry, the skin was glued to a previously worked Crackle Paste board.

TRANSPARENT: I have worked extensively with Plexiglas paintings, having finished an eight painting commission for Whole Foods Market®. Working with the plexus, I took advantage of the wall color, by leaving areas open and clear, also painting on the backside and the front side, so with that experience, it was a simple step to create transparent acrylic skins to re-create the options. Clear Tar Gel, GAC 800 and Soft Gel (Gloss or Matte) work well for clear skins.

Working on the back side of the image with transparencies also affords some interesting options, especially when applying to patterned backgrounds as the painting obliterates the background.

LACE: I took an actual piece of blue lace and covered it with Self Leveling Clear Gel, embedding the lace in the gel. After drying it, I coated it with Digital Ground for Non-Porous Surfaces. The printed image is a color enhanced and digitally tweaked original print. Again, the edges were removed with water, changing a rectangle shape to oval.

RIBBONS: Mary Morrison, our GOLDEN Working Artist in Colorado had been working with fabric artists and had shown me a way to embed ribbons in Heavy Gel (Matte). Tape the ribbons flat and taut, leaving a ½ inch between them, then spread
a layer of Gel over the surface. On the back side, the ribbons remain uncoated, but the top side is one clean layer of gel. Either side can be coated with the Digital Ground and printed. Make sure you cut and tape all the edges carefully on the carrier sheet. The best results are with light value ribbons.

In this skin you can see the edges of the “ribbons” on the left side. In this case the ribbon was a pressed paper in the shape of a vine and leaves. The blue image was printed on the slick side, over a Digital Ground. The back side was washed with a thin glaze of Titanium White and Quinacridone Red, finally applied over a background of Micaceous Iron Oxide.

ACRYLIC SKINS EMBEDDED IN ACRYLIC SKINS: This was an extension of a workshop that I developed for Rubber Stamp artists. I had created marbled paint skins - flat pours of Clear Tar Gel with droplets of Fluids, then using the tip of a palette knife, dragged the color through. This process is done much like the chef who swirls chocolate sauce through raspberry sauce for the desert tray! I had stamped an image onto this dry skin and cut out the shapes for a collage workshop. I wondered if I couldn’t use these pieces in a skin, so I placed them on the HDPE, and poured Clear Tar Gel over them, and spread it out flat. When this was dry, I applied the Digital Ground to one side and printed on it. The result was curious and mysterious.

TEXTURED: I created a quite beautiful and unusual skin by beginning with long spidery strands of Clear Tar Gel dripped over the HDPE. When dry I brushed another layer of Clear Tar Gel over the strings to consolidate the piece. A final thin wash of Quinacridone/Nickel Azo Gold was applied. The paint pooled around the edges of the raised line, revealing the patterns of the first layer.

On this skin, I actually forgot to apply the Digital Ground, and a very detailed photograph of Chrysanthemums bled over the surface, only leaving the bright white area with crisp edges. It was one of the lucky accidents, as it is a much better piece with the greenish black becoming one element, dissolving the leaves and stems.

DARK SKINS...DARK PAPER: At one point during exploration, it becomes obvious that the printer does not print white! So, the skins that you make must be fairly light in color if you want the image to be clearly visible. But you don’t have to be limited by that. There are some very interesting ways to use dark paper or skins, in conjunction with the Digital Ground White (Matte). Using an absorbent paper such as Arches® Black, run it through the printer without a digital ground. The image will be faint, but you will be able to see the general outlines. Use the Digital Ground White (Matte) to paint into areas that you want the image to be clearly printed, leaving some areas unpainted. When the Digital Ground has dried, (and not having moved the original image) run the image through the printer again.

The same image was printed on an open filigree Japanese black paper. This paper was glued down over a brightly printed image, also a digital print onto a skin of Coarse Molding Paste embedded into cheesecloth. You can play with the same ideas with dark skins...

This print of a photograph was printed on Arches Black (a printmaking paper). The print is only visible on the bright white of the ground. My husband, Phil Garrett used a large round brush, and quickly, loosely applied the Digital Ground White (Matte) to Black Arches printmaking paper. The application was ragged and in some areas almost dry brush. When the full color image was printed, it created an odd mix of highly detailed sections and ghostly abstract areas. The Digital Ground White (Matte) picks up the most vivid color and detailed images.

Another interesting skin in the “dark” area is using the Coarse Alumina, a blackish, grayish gritty gel. I mixed this in with GAC 800 for a poured skin resulting in a “dirty stippled” translucent skin, but too dark for a printed image. I had to apply the Digital Ground for Non-Porous Surfaces to get an image on this skin. When it was printed, I removed areas (Rosie the Heeler) with a brush and water. When dry, I applied the Digital Ground White (Matte) into the area. Then I ran the same print through the printer again. (If you have this image saved in Word, then you will have it registered.)
GOLD MICA FLAKe: I was curious to see if I could embed the Mica flakes in a skin, so I mixed Gold Mica Flake into the Clear Tar Gel, poured it out, and spread it with a palette knife. In later versions, I added a touch of Interference Violet for greater reflective qualities.

Now that I had Gold Mica Flake embedded in a skin, what else could I experiment with?

PRINTING ON FABRIC: Many fabrics are porous enough to take a print without the Digital Ground, but using the grounds will help to secure more ink on the surface rather then bleeding through. It will also stiffen some fabrics.

Cotton - This is simple polka dot 100% cotton. I used Digital Ground Clear (Gloss) to prime the fabric. I taped the cotton to cover stock for a fairly stiff carrier sheet.

Polyester - This is “tie-dye” polyester fabric. I used the Digital Ground for Non-Porous Surfaces.

This is a 100% Polyester fabric, with stitched embroidered designs and metallic thread, using the Digital Ground for Non-Porous Surfaces.

Printmaking Opportunity.

There are some obvious printmaking options using the printed image from an ink-jet printer. The first is printing onto lightweight Japanese papers that are traditionally used for Chine-collé. Many of these papers are absorbent enough to accept the ink without the digital ground, but the application of the digital ground will keep the ink on the surface, and prohibit it from bleeding through to the backside of the paper. This is helpful when the paper is adhered to the larger printmaking paper that is the backing support. The image should be sprayed with Archival Spray Varnish because most often the Japanese paper is applied to a dampened printmaking paper. Chine-collé is most often done on a large professional press.

There are opportunities for printmaking application on a smaller scale, and without a press. Using a transparency film for an ink-jet printer, coat it with two layers of the Digital Ground for Non-Porous Surfaces (test both sides) before printing, have a high quality printmaking paper (half sized, waterleaf, paper damp and flat on a hard surface) and a brayer or woodblock batten ready. You can also have registration marks on the paper, as you will be able to see through the film for placement. Run the film through the printer, and immediately place facedown on the damp paper, using one of the tools to carefully rub the image into place. Pull off the film, and the image should be directly transferred to the paper. This will take some trial and error to find the right papers and offset methods.

Scale.

Eventually, I wanted to do larger pieces and was yearning for a larger printer, with a straight through path so that I could do larger prints, but was a bit put off by the prices. While exploring the web one day, I ran across a free program, blockposters.com. It was so simple even I could use it! You download one of your images, fill in the size and number of pages you want the program to create, and hit enter...your image is put into PDF files...and can be printed out immediately, creating very large versions of your image! I was able to make several small skins that could be glued together to create a larger image, saving the current need to invest in a larger printer.

Combining with Paint.

This is the fun part, adding these skins and images to an array of grounds created with gels. I have hundreds of surfaces that I have created with various layers of gels, grounds, washes, stains and texture. Finding the right surface to apply these skins to is a challenge. Painting back into the skins, pouring gels over, or slathering with thick gels, and scraping back is all part of incorporating them into pieces.

Explosion.

In my teaching and lecturing on the new Grounds, I have had a new group of artists attending to discover what these products can do. Digital Artists, who compose their paintings in the digital world, are interested in the new surfaces available to them. Fabric artists, who make large wall hangings, quilts and mixed media, are fascinated by the opportunities for printing on fabric. Photographers are intrigued by the possibilities for new substrates, and it is an obvious boon to printmakers. Schools and art teachers are finding this to be a wonderful teaching tool. An inexpensive ink-jet printer... who would have thought?
New GOLDEN Products

By Ulysses Jackson

Silverpoint / Drawing Ground

In past Just Paint newsletters, GOLDEN has highlighted many new Experimental Products covering a wide range of unique working qualities. Many of these products being produced as experiments had a short life span. However, some have gained a significant response from the artist community and continue with forward momentum to become permanent line extensions.

Silverpoint / Drawing Ground is one such product; first produced in-house as experimental, speaking to what was thought of as an esoteric and slightly antiquated method of drawing. Soon after Silverpoint / Drawing Ground was introduced at CAA, as well as in Just Paint Issue 18, it became apparent that many artists understood the benefits of the modern acrylic system over a more traditional hide and chalk ground. As a result, GOLDEN is pleased to announce that Silverpoint / Drawing Ground has moved from an Experimental Product and is being launched in the regular line.

This Silverpoint / Drawing Ground replaces the much more cumbersome traditional grounds, which required boiling animal glues or using casein. In fact, this new ground is much more foolproof, in most cases allowing for just one coat application. Artists using Silverpoint / Drawing Ground can achieve very fine delicate lines with a metal stylus or other drawing media. Silverpoint / Drawing Ground is formulated as a thin fluid to aid in flow and leveling. As solids may settle upon storage, shaking is important before use. Small amounts of other GOLDEN Fluid Acrylic colors can be added to this ground for tinting purposes without a significant drop in performance.

While many artists enjoy the fineness of line and delicate qualities achieved with a metal stylus on Silverpoint / Drawing Ground, the scope of this product should not be limited to a singular use. When used as a general drawing ground, other media may be intermixed with metal point drawing or used alone to create new effects. It is possible to adjust the absorbent qualities of the Silverpoint / Drawing Ground by creating a very thin acrylic film over the entire surface which was primed. This allows greater fineness of line with diverse drawing media such as graphite, colored pencil, ink, and some markers.

A complete Technical Information Sheet is available online: goldenpaints.com/technicaldata/silverpoint.php

For more information on Silverpoint as an art form, please see: http://silverpointweb.com/groundwork.html
http://en.wikipedia.org/wiki/Silverpoint

Fluid Historical Colors

Due to continued demand for Fluid Historical Colors, GOLDEN is pleased to offer two new products previously only available in the Heavy Body Historical Hue line.

Fluid Historical Van Dyke Brown Hue – Also known as Cassel or Cologne earth, the use of Van Dyke Brown dates back to the 17th century. Originally obtained from the Cologne and Kassel regions of Germany, and later obtained elsewhere, the pigment from each locality can vary slightly in color and composition, leading to confusion in the precise qualities of this color. Van Dyke Brown was the most difficult hue that could adequately represent this elusive pigment. Avoiding the common blends called Van Dyke Brown, that are simply an easy mix of Burnt Umber and a black, GOLDEN captures the rich vegetal undertone of peat, by using Transparent Red Iron Oxide as the base and carefully adding just enough Carbon Black to create a clean sepia tone.

Fluid Historical Viridian Green Hue – Guignet of Paris patented the process for manufacturing Viridian Green in 1859. The popularity of this bright, exceedingly clear blue-green color led some to believe that it could eventually replace all other greens, both ancient and modern. Unfortunately, true Viridian Green pigment is very reactive in aqueous solutions preventing the formulation of a stable product. To mimic the near perfect bluish green, GOLDEN blended a concoction of Phthalo Blue (Red Shade), Nickel Azo Yellow, Zinc White and Raw Umber. The result has mixing properties different than any single green pigment offered through GOLDEN and is a useful replacement for artists familiar with the original.
Fluid Color Travel Interference Colors

In recent years much of the innovation in pigment technology has been driven by the special effect pigment market. These classes of pigments have gained a wide acceptance in the automotive field often being referred to as “two-tone”, or “chameleon” colors. While these trade names give a general idea of the coloristic properties of these paints, Golden Artist Colors favors the more scientific title of Color Travel Interference Colors. This class distinction in essence means that cured films of these coatings change their colors depending on the angle of the viewer. Color Travel Interference Colors have the ability to shift in color cast due to pigment comprised of mica layers coated with varying degrees of oxide pigment particles. The relationship between the reflectivity of mica and oxide pigments’ absorptive properties refract due to changing the return angle of a light source.

Fluid C.T. Interference Green-Blue – Is the hardest of the C.T. Interference colors to give an exact description of its color qualities. This is due to how gradual the shift from green to blue happens through the transition arc. When a dry film is viewed directly perpendicular, coppery pearl tones are dominate. With any slight shift in angle, these coppers quickly give way to a yellow-green interference. As the angle increases, the green tones become increasingly blue until they turn a turquoise blue.

Fluid C.T. Interference Green-Orange – This C.T. color is very unique in its transitional range, being that it is highly angle dependant. At off angles over dark colors, it appears very orange with some similarities to earth tones. When viewed directly, it appears an interference yellow-green. Over a white ground, pale blue undertones are present yet very transparent. As the angle increases, the various color travel

Golden Foundation Builds Artist Residency in Columbus, NY

By Barbara Golden

In 1980, Sam and Mark Golden put together a business plan to start a small paint company in upstate New York. The company, Golden Artist Colors, would focus on a niche market, producing high quality acrylic materials for professional artists, and would service artists by listening to their needs. Over the next 28 years, this simple idea has led to collaboration with artists, resulting in the production of thousands of custom and experimental products used in the creation of art, as well as the development of valued friendships.

As word traveled throughout the art world of a small company in the hills of Chenango County that would tailor materials to the requests of artists, Golden Artist Colors strengthened its commitment to the development and training of a professional lab staff, including Polymer Chemists, Paintmakers, Technicians and Artists. Now, artists could call the company, speak directly to a lab technician and ask questions ranging from matching a color no longer available on the market, to best practices for varnishing.

As the company became larger, new ways were found to remain in contact with the arts community offering the entire technical staff for consulting and support for artists’ needs, including the development of a website that continues to lead the field in offering valuable information for artists. The GOLDEN website, goldenpaints.com, became an online resource, providing sophisticated technical information sheets, blogs and the ability for artists to email their questions directly to the technicians.

Even more adventurous artists would travel the dirt roads of “cow country” to...
manipulation of images during the printing process, like the old days of Polaroid prints?

The printmakers have been on the leading edge of this exploration, as demonstrated in 2004 when Dorothy Simpson Krause, Bonny Lhotka and Karin Schminke, known collectively as Digital Atelier®, wrote a book called, Digital Art Studio: Techniques for Combining Inkjet Printing with Traditional Art Materials. This book reveals a host of sophisticated techniques that involve multiple layers of printing, painting, and the incorporation of various other mediums and collage elements into the final piece.

Until recently, the alchemy of these processes had been limited to a small, but ever widening circle of artists. Then, a couple years ago, the development lab here at Golden Artist Colors brought some new ink-receptive products to my desk and announced that with these materials and the educational outreach of GOLDEN, all artists could have access to the direct image transfer process.

Considering these ink-receptive products as part of the larger GOLDEN system of products was an interesting proposition. Here were products that weren’t about color or texture; these products were about what could go through a printer, what the resulting print quality would be, and what I could do with it once it was printed.

The basic premise of these new products seemed simple enough: “coatings that turn any relatively flat surface into a printable surface.” Instead of buying “ink-jet ready”, commercially coated papers, I now had access to the coating myself. But what was really going to happen and where should I start?

Since commercial coated papers worked in printers, I figured a good place to start might be with a type of paper, such as watercolor paper.

I followed the Lab’s recommendation, applying two coats of the Digital Ground Clear (Gloss) to the paper, letting it dry and then I was ready to print. I wasn’t sure my printer would take a non-standard paper size, so I cut my paper to be 8.5 x 11. I stuck it in the paper tray of the printer, found an image I liked, and hit print. The paper went through without a hitch and the image was beautiful, cool! But then I thought, ok this looks good, but what would it look like without the Digital Ground? So I ran another piece of watercolor paper through the printer, this time without any coating. Comparing the two printed pieces, I was disappointed to find that there wasn’t a huge difference in the quality. The uncoated paper looked good too. So what’s the big deal with these Digital Grounds anyway?

There had to be something more to this, so I called up the folks at Black Ink™ Paper and we talked about a variety of specialty papers. They told me that some papers could be printed on through an ink-jet printer just fine, but with other papers, the ink will soak through the top layer of the paper, leaving a dull image, or when a paper contained metallic fibers, the fibers would repel the ink so that the image wouldn’t stick to the paper.

With my next round of experiments I used a variety of specialty papers, some metallic, some not. Now the results were getting more exciting. Several of the papers that weren’t coated with the Digital Ground produced less than desirable images when they were uncoated, but really beautiful, clear images when they were coated. By using the Digital Ground Clear (Gloss) I could combine the image with the print on the paper, making the same image take on a variety of different feelings with each unique paper. During this time I also learned that the Digital Ground White (Matte) made a beautiful white surface, so that the watercolor paper I had started with had greater differentiation if I used the white Digital Ground as opposed to the clear.

From paper I branched out to fabric. The fabric was equally as thin as paper, and while the application of the Digital Ground stiffened the fabric, sometimes the fabric was still a little floppy. At this point I learned to adhere the material I was working with to a “carrier” sheet. A carrier is simply something standard that a printer would expect to receive. In most cases, a regular piece of printer paper works just fine; sometimes something a little stiffer like cardstock is helpful. After preparing my fabric with the Digital Ground, I used low-tack painter’s tape to hold the leading edge and the right side of my fabric to the carrier. Most of the time just taping these two sides is sufficient since this is where the printer is trying to grab what’s going through.

Once I had these examples, I started showing my colleagues what the Digital Grounds could do. They said cool! What else can we try? We looked around for anything thin and flexible enough to fit through the paper path of the printer. What about aluminum foil from the kitchen someone asked. Yeah, let’s try that! After two coats of the Digital Ground for Non-Porous Surfaces, we taped the aluminum foil to a piece of printer paper and stuck it in the printer. We printed a color illustration and wow, the color just popped on the metal foil. With this type of surface the ink takes longer to dry, so it’s still quite fragile when it first comes out of the printer. However, this presents its own opportunity because now there is time to manipulating the ink, erasing some areas, or drawing in others. Similar to the way old Polaroid prints could be manipulated.

Just to compare, we tried putting a piece of aluminum foil through the printer without any Digital Ground. The ink had nowhere to go and while the image was recognizable when it first came out, as the ink dried it crept and crawled so that the next day the image was totally unrecognizable.

With the success of aluminum foil, we tried Saran Wrap®—could a photograph be transferred to Saran Wrap—wouldn’t that be something! Using the same process as with the aluminum foil, we coated the Saran Wrap with two coats of the Digital Ground for Non-Porous Surfaces, taped the wrap to a carrier and printed. The resulting image came out clear with beautiful colors. One word of caution though, Saran Wrap likes to stick to itself—while the printing and image worked great, it was a bear to keep as an example.

Next up, acrylic skins! If we could put things like metal foil and Saran Wrap through our printer successfully, then thin layers of our own acrylic products should be a breeze. By using layers of acrylic, the door swung wide open for manipulating the look and feel of the printed surfaces. The
The trick to creating acrylic skins to go color photographs. line art, black and white photographs, or Grounds, by supporting the direct print of on a whole new dimension with the Digital build up tape on two ends of a palette knife, palette knife or what seemed thin, thin when I spread them out, but when out thin enough was deceiving. They seemed thick to start with, so getting them spread as Fiber Paste and Glass Bead Gel are a bit got a little trickier. Some gel mediums, such as Fluid Acrylic skins were easy and fun, interplay of the unique colors. (Fine) also produce beautiful images with the process, the opportunities abound for manipulating the inks, but a disadvantage when wishing to preserve the image and then augment it. When working in this direction, it is recommended that the print be sprayed with Archival Varnish (Gloss) to “fix” the ink before working on top of the print. One or two light coats of the Archival Varnish and you’re good to go with paints, gels and mediums on top of the photograph or other printed images. Two new companion products that were released at the same time as the Digital Grounds, Gel Topcoat w/UVLS in Gloss and Semi-Gloss, can be used either on top of a print to offer protection from fading, while providing texture, or, even cooler, they can be used as an acrylic skin. By printing the image on the back of the skin, when the skin is collaged into a larger piece, the print is inherently preserved by the UVLS that is built into the gel! Regardless of the process when working with ink-jet printers, it’s important to know that printer inks are more fugitive than acrylic. So despite the longevity touting done by printer manufacturers, the standards for those claims are not the same as those for fine art materials. For this reason, it is important to apply a varnish or topcoat to your final image if you want it to endure for the long haul. As pioneers of new materials and processes, the opportunities abound for melding images with unique materials and for creating a look and feel that leave people asking “wow, how did you do that”?!

Tips & Tricks

The truth about pizza wheels

In the early days of our experimenting we thought that the pizza wheels, or ejection wheels, on the printer had to be removed in order to avoid getting ink on the inside of the printer. We have since discovered that removing the pizza wheels is entirely unnecessary. We’ve had many artists who have not adulterated their printers in any way and have experienced great success on a multitude of surfaces.

Printer paper paths

We often get the question, “what printer model should I use?” The model is really immaterial, what’s important is the path that the paper takes through the printer. There are three basic paths – U-Shaped, L-Shaped, or Straight. The U-Shaped path requires the paper to bend the most, so this will limit some of the types of materials that can be put through this type of printer, but many other things will still go through fine. The Straight path is the most agreeable, but generally only comes with the more expensive printers. The L-Shaped path is available with many moderately priced to low-end printers and will support a wide variety of surfaces.

Carriers – paper vs. Mylar®

A carrier sheet is simply a piece of paper or other material that a printer would expect to have passed through its path; a piece of printer paper, Mylar® or acetate can all work. The main function is simply to provide a sturdy surface for delicate or irregularly shaped substrates. One note, some printers have trouble “seeing” clear carriers such as Mylar and won’t pull the page through. If this happens, try using a piece of printer paper as the support for your surface instead.

How long does it take to dry?

A practical question, the answer to which is always full of caveats. In general, absorbent surfaces can be re-coated in about an hour or less. Non-absorbent surfaces, such as metal foil or gel skins take longer, more like 3-6 hours before they are dry enough to re-coat. Always be sure a surface is fully dry before printing – roughly 2-3 hours for paper and overnight for metal foil.

How many coats do I really need?

The recommended number of coats is two, to ensure good coverage. We’ve found that this advice is a must on papers and most porous surfaces, but on some less porous materials, one well-spread coat gives sufficient coverage to get the image quality you are looking for.
Preventing printer jams

If you’re having trouble getting an acrylic skin through the printer without jamming, even though you have it taped to a paper carrier, try coverstock instead of plain paper, and/or try moving the tape back about an inch from the leading edge, so that the printer grabs the paper, not the tape first.

Not just for printing

Since the premise of the Digital Grounds is to capture ink drops, it can also be used to prepare surfaces for rubber stamping, particularly on metallic papers and acrylic skins that otherwise repel ink.

Tricks for getting acrylic skins thin

There are a number of tools that can be used to spread out an acrylic, such as Fluid Acrylic color, to make a skin. An extra large palette knife like a baker might use to spread cake frosting works well. Another approach is to use a large spackling blade, such as those used by drywall installers. Using a low-tack tape, build up layers of tape on each end of the blade until you have a thickness of about 1/16 to 1/32 of an inch between the built up tape and the edge of the blade. This way, the acrylic that is spread by the blade, between the tape ends, will have that defined thickness.

Printer models that we’ve used

Despite what I’ve already said about printers and paper paths, I know everyone wants specifics. So, while I know there are many more printers than these that will work just fine, here are the models that we’ve used in the shop at GOLDEN:

- Epson Stylus® Photo Pro R2400
- Epson Stylus® C120
- Epson Stylus® CX8400 All-in-One

(a recently discontinued model, but similar low-end all-in-one printers, such as the CX7400 should work equally as well.)

Each of the above printers was selected for different advantages. The R2400 is more expensive, but has a straight through paper path. The C120 is small, light and compact. The CX8400, being an all-in-one, allows us to travel and print without a computer attached.

MURAL PAINTING

Conjecture to Knowing a Manufacturer’s Point of View

By Mark Golden

I think that after a 60-year history of acrylic coatings that we would have a good understanding, with very specific data, on the longevity of acrylics in outdoor environments. I have seen exposure test samples of original acrylics from the Rohm & Haas test facility outside Philadelphia of a coated wood panel set out in 1954 that are in incredibly good condition; no breaks at all in the film and very little color loss. And I have also seen test exposures of coatings on metal panels in test facilities in South Florida that after 3 years have totally been destroyed.

The specific aging data on outdoor murals painted in acrylic coatings is not available. We have a great deal of anecdotal information and examples that have lasted well over 20 years and those that have not lasted two years. Our oldest example of a mural with GOLDEN acrylic dispersion paints was conceived, developed and executed by artist Archie Rand in Jerusalem, in 1984. The murals consisted of seven enormous panels depicting the “Creation Story.” The paints have held up well, except for significant changes in the yellow over the last 24 years. The mural “West and North” 1987, by Norman Yates in Edmonton, Alberta Canada, composed of hundreds of painted 4 foot by 8 foot panels, has endured the Canadian climate with little change. The mural “Homage to Seurat: La Grande Jatte in Harlem,” painted by the late Eva Cockcroft in 1986 in Manhattan, has a great deal of flaking and many of the reds and yellows have changed to pastel in color. All these murals were painted around the same time, yet in very different environments and in very different conditions.

What causes some murals to last for decades and others to begin to fail soon after completion? Unfortunately, we are only beginning to understand the dynamics that affect these public artworks. Yet while we do this, many major murals by significant artists are being destroyed, most for reasons not related to the materials. Saving our public legacy has been the mission of the group sponsored by the Heritage Preservation, formerly the National Institute for Conservation. This group called “Rescue Public Murals” (RPM) has been co-directed by Dr. Timothy W. Drescher and Will Shank, both with considerable credentials in art history, murals and art conservation, beginning in 2006. Its mission has been to identify the inventory of significant works around the country and to assess and potentially remediate conditions that have led to the works’ state of disrepair or potential destruction. As one of its first public efforts, RPM has established a best practices section on its website.

I am most excited about a new effort led by Mark Gottsegen, the Administrator of the Art Material Information and Education Network, (AMIEN). Mark has already gained the commitment of colleagues in paintings conservation and mural artists to develop a testing program to begin to monitor how well the coatings used in outdoor murals withstand the various environmental conditions which they face. Using a portable spectrophotometer to measure changes in the coatings over time, AMIEN will begin to assemble data that will replace a good deal of the conjecture and rumor with real information. Eventually we hope that AMIEN will be able to convince many communities with a significant mural program to support this effort with a minimal investment, but with a tremendous payback to improving data and eventually information for best practices. AMIEN is currently in the beginning stages of this work and commitment to collaborate with RPM as both of these organizations advance the goals of preserving public art for generations to enjoy.
has embarked on a project to continue the legacy of founders Sam and Adele Golden and to give back to artists with the development of an artist residency site, right down the road from Golden Artist Colors. Studio spaces that will center on the individual artist and the artist’s creative process, are being built in a hundred year old barn located on Bell Road, just a five minute walk from the GOLDEN factory. The barn is surrounded by hundreds of acres of walking paths, meadows and forests, and the beautiful views of the rolling hills of Chenango County.

Two years ago, with assistance from the New York State Artist Workspace Consortium, nysawc.org, the Golden Foundation began its commitment to providing living and workspace opportunities for artists. Sydney Waller, Executive Director of nearby Sculpture Space in Utica, notes: “Now more than ever, artists need residencies to ‘free them up’ to do what they do best: make art. The Golden’s vision and follow through on creating a new residency program in the bucolic environs - and in these times - is encouraging and inspiring for all of us. Their legendary generosity with materials and technical help is now matched with a whole new level of extraordinary support for artists. We welcome them with great pleasure to the world of residencies, and look forward to collaborating with them in the years ahead.”

Phase I of construction began in 2008, with completion of the residency scheduled for late 2010. The barn will include three living spaces and six studios. During the construction phases, The Golden Foundation is granting Golden Fellowships to artist residencies in the United States this year, including Headlands Center for the Arts in California (headlands.org), Bemis Center for Contemporary Arts (bemiscenter.org), Vermont Studio Center (vermontstudiocenter.org) and Atlantic Center for the Arts (atlanticcenterforthearts.org).

The Golden Foundation Residency Program is just one more way in which our community, a loyal, dedicated staff of over 140 employee owners, and the Golden family can continue to provide an extraordinarily unique experience for artists. By simply making available the freedom for artistic experimentation and exploration, we can share in the excitement of being part of an incredibly creative and inspiring community of artists.

visit the paint shop, often working in the lab with Chemist Jim Hayes, Technician Mike Townsend or Application Specialist Lori Wilson. The description of an exciting new project with Mark would eventually capture the imagination of the technical staff and work would begin in earnest to create experimental materials that might just meet the artist’s concept or ideas.

The factory became a place to collaborate, for artists to visit, and lab staff to address material challenges, but even more importantly, it became a place for creating deep, long lasting friendships. Employees delighted in being part of a destination for artists, providing the time, staff assistance, equipment, and technical resources necessary for fueling artistic expression. Yet even more compelling, were the many growing relationships with artists from around the world.

Today, GOLDEN is proud to continue the tradition of conversation and collaboration in another way. The Sam and Adele Golden Foundation for the Arts, goldenfoundation.org,
GOLDEN Working Artist Program Director, Patti Brady, Publishes North Light Book

By Jodi O’Dell

In Patti Brady’s book, Rethinking Acrylic, Radical Solutions for Exploiting the World’s Most Versatile Medium, she explores the versatility of the acrylic medium and its ability to mimic oil paint, watercolor, gouache and encaustic. She demonstrates how it can be applied in subtle transparent washes or troweled on as a heavy thick impasto as well as making the medium as transparent as glass or as dense and black as tar. Because of its ever-changing state, Patti Brady covers the most popular techniques for acrylic, making them accessible to the contemporary artist through a variety of mini demonstrations followed by full demonstrations that show how to transform those techniques into finished paintings.

Learn more about Patti Brady’s professional career and her artwork by going to pattibrady.com.