How to Make Canvas Printing Work for You

An in-depth look at canvas inkjet printing and the factors to consider for producing various print volumes, from short-run custom to high-volume production printing, including: materials and finishes, printers and ink sets, coatings and finishing.

Is canvas printing a fad? It’s certainly a growing and profitable segment of the print market, and if it’s a fad, it’s one that should continue for years to come, which means it’s probably not just a fad.

According to InfoTrends, a printing industry research firm, printed canvas is expected to grow from about 500 million square feet in 2013 to 860 million square feet in 2018 for a five-year CAGR (compound annual growth rate) of 11.6%.

InfoTrends also reports that canvas represents about 12 percent of the total online photo printing market in the U.S., and that social media sites, like Instagram, have actually helped fuel growth in this market. After all, while it’s nice to share photos with your friends on a computer screen, many consumers still desire something distinctive outside of cyberspace they can hang up on the wall.

That’s healthy growth and represents a lot of opportunity in various market segments, including: limited-edition art reproductions, consumer photography, home and corporate décor, hospitality, hospitals, restaurants and bars, and just about anyone or any organization looking to spice up their spaces with the unique canvas look.

For print shops, sign companies, commercial printers, photo labs, photographers and fine art reproduction companies, the big questions are about utilizing the best production methods, choosing the right materials, and finding the best ways to finish canvas based on their market, both as it stands now and where they want to be in a year, two years and beyond.
Materials and Textures

There are quite a few characteristics to consider regarding inkjet canvas currently available on the market: base material, weave, weight, finish, and optical brighteners (OBAs). All of these characteristics, both by themselves and combined, factor into which canvas is chosen for a given project.

Choosing the “right” canvas is mostly subjective since different people like different looks. Some may like a more textured surface, while others will prefer a smoother surface, for instance. It may also depend on the lighting situation where the canvas is being displayed.

When you’re discussing a canvas print project with a client, make sure you understand their expectations and be cognizant of the environment in which the canvas will be displayed. All of these factors, including budget, will help determine the right canvas for the project. First, let’s look at the base materials, starting with the most common, polyester/cotton blends.

Poly/Cotton Blends: Traditionally, artist canvases were made of linen or cotton. Poly/cotton blends seek to split the difference between the aesthetic qualities of cotton with the consistency polyester provides in production. Most of these blends are 60/40 in favor of polyester since the polyester helps ensure that the canvas is consistent in the manufacturing process, and thus prints consistently from roll to roll and lot to lot. No one likes surprises, and a poly/cotton blend ensures that the first print will look the same as the 50th print.

Polyester: Typically used for higher-volume projects, because it’s less expensive, polyester canvas is smoother than poly/cotton blends or 100% cotton canvas. It’s often used for décor applications, decorative signage and even banners and wallcoverings. Some like the smoother surface for photography reproductions where texture may detract from the image, while artists prefer the texture of a more traditional-looking canvas. While the tactile and aesthetic qualities of canvas – base material, texture and finish – are mostly based on what a given client likes, the economics of production may dictate its use.
Materials and Textures, Cont.

**Cotton:** 100% cotton canvases tend to have the most texture and personality, which is what most people think of when they envision art canvas. But because they are made up of 100% natural fibers, there are more likely to be variations in whiteness, weave and texture from lot to lot. To some printmakers, this variability in the color and look of their prints is an advantage because it gives each print a very original look. That’s great for a custom, one-of-a-kind print, but may not be so great for projects that require consistency from print to print, even shorter-run limited edition prints.

In addition to the base material, the texture of canvas is determined by the diameter of the threads used to create the canvas and how tightly the threads are woven. The tighter the weave, the less texture you’ll see in the finished canvas.

The ratio of threads on the loom running in the X and Y directions also affects the texture. A canvas with a 2-over-1 weave has more texture than a 1-over-1 weave since there are more loops per square centimeter.

A highly textured base canvas may lose some of its textured look if coatings are applied to change the finish or make it more water- and UV-resistant. Just be aware of this as you apply coatings; the more you apply will fill in the valleys of the material, altering the texture to a smoother finish.

Inkjet canvases typically range in weight from 16 oz. to 22 oz., though there are lighter and heavier canvases on the market. A heavier canvas will obviously be more durable during stretching and finishing and when it’s handled, but a thinner canvas will usually be more economical. Again, the client may prefer the aesthetics of a heavier-weight canvas or may not care either way.
Sunset Production Matte Canvas is 100% polyester and, as the name implies, it’s geared toward higher-volume production work that still requires quality reproduction.

**Finishes: Matte, Satin, and Gloss**

The finish of a canvas – whether it’s matte, satin (luster) or gloss – is once again almost wholly dependent on what the client prefers, though the lighting environment will be a factor. However, there are certain qualities of each finish to keep in mind…

**Matte:** This finish is usually preferred for fine art and lighting situations where glare could be an issue. The “problem” with a matte finish is that it has a smaller color gamut. If there are a lot of bright colors that require greater accuracy, a satin or gloss finish may be best. However, adding a gloss coating to a matte canvas can help mitigate this restrained color gamut, and make the images pop more than if they weren’t coated. Still, many matte canvases have a good color gamut that will work well in most applications.

**Satin:** As the name implies, you’ll get a nice satiny sheen with this finish that is not as susceptible to glare, but expands the color gamut. You’ll typically choose this finish simply because the client likes the look of it.

**Gloss:** This is a great option for canvases designed for solvent or latex printers because you can print and skip the coating step, saving time and money in the process (more on this in *The Printer Connection for Canvas* section below). For aqueous printers you have to be extra careful when you stretch as a gloss inkjet coating is more likely to crack. For artists who prefer a matte finish but are especially picky about hitting their colors as closely as possible, you can print to a gloss canvas and apply a matte coating.
OBAs and Archivability

Optical brightening agents, or OBAs, have been used in traditional photo papers since the 1950s and photographers have had a love-hate relationship with this additive ever since. While increasing the whiteness and thus the color pop of printed images, many are concerned that this decreases the archival qualities of the print.

Archival specifications are defined by various international institutions such as ISO, DIN, and the Library of Congress. Within the specifications, there are allowances for chemical additives to brighten and stabilize papers.

Many of the most popular fine art papers and canvas on the market today utilize optical brighteners to create consistent color base materials. These papers have been tested by various organizations, such as Rochester Institute of Technology, Wilhelm Imaging Research, and others, obtaining 100+ year ratings.

For example, Sunset by Fredrix Matte Canvas received certification from Wilhelm Imaging Research, Inc. to last more than 200 years in specific conditions.

For a more thorough discussion of this topic, click here to read an article by Dr. Ray Work, To Brighten or Not to Brighten.
The Printer Connection for Canvas

Surveying wide-format printer technologies – and their strengths and weaknesses – for canvas printing.

Beauty, as they say, is in the eye of the beholder. As noted in the previous section, your clientele and market focus will ultimately dictate the choices you make regarding canvas materials and finishes. And so it goes with your choice in printer technology.

Though the volume you produce in canvas is an important element, it’s only one element of many that need to be considered to find the right printer. Those elements include:

• Your current print production and application mix.
• What you want that print production and application mix to be in the future, and the clientele you aim to capture.
• The expectations of your clientele: do they require almost perfect fidelity to the original, are they more concerned about producing multiple prints at an economical price with short turn-arounds, or somewhere in between?

• Your capital equipment budget, both initially and over the long haul of the printer’s life.
• How much post-print finishing you’re willing to do and how much finishing adds to your overall production time and costs.

The choices in wide-format printing used to be fairly simple, but this simplicity also brought limitations. With the introduction of more affordable and reliable printers using solvent, latex, and UV-curable ink sets, the potential applications became much more varied and print durability became less of an issue.

Each wide-format printing technology – aqueous, solvent, latex and UV-curable – has certain characteristics that need to be taken into account based on each print shop’s goals, capital equipment budget and operating environment. While there may not be such a thing as the perfect printer, there is an ideal printer waiting to be used to its full potential.
Aqueous-based printers, so called because the ink used is primarily water mixed with either dyes or pigments, are widely used for canvas printing and typically offer the best image quality. Most print shops have moved to pigmented inks because these inks provide a more durable print than dye inks; pigmented inks are now the standard.

Often referred to as UV inks for their ability to resist UV light, they should not be confused with UV-curable inks, which are discussed later. The advent of pigmented inks for aqueous printers eliminated much of the laminating previously needed for prints using dye-based inks for short-term outdoor and long-term indoor applications.

However, it is still recommended that you coat aqueous inkjet canvas prints to help protect them from environmental factors and against cracking on the edges when stretching. Film laminates are rarely used for canvas prints, mainly due to aesthetic reasons. Liquid coatings enhance the canvas texture and provide a more “painted” or artistic look, and come in gloss, satin and matte to provide different finishes.

Along with the development of pigmented inks, there have been a plethora of printable media – from photo papers, polypropylenes and polycarbonates to fabrics – optimized for these inks that provide excellent color reproduction and greater longevity.

In other words, if you’re doing a variety of applications, including canvas prints, aqueous printers will fill the bill for most of those.

Following is a rundown of aqueous-based printing’s strengths and weaknesses, based on the latest printers from Canon, Epson and HP...
Water Works: Aqueous-Based Printers, Cont.

**Cost:** Aqueous printers have a significantly lower cost of entry. You can get a 42-inch or 44-inch wide printer for $3,000-$8,000 or a 60-inch unit for $10,000-$13,000, as opposed to $15,000-$25,000 for an entry-level solvent printer, around $11,000 for a latex printer, and more than $60,000 for an entry-level UV-curable printer. The greatest cost will be on the finishing side. You don’t have to coat aqueous prints, but as noted above it’s recommended that you do. From print to ship, expect to add at least 48 hours to production since you should wait 24 hours before coating and 24 hours before stretching. The coating step obviously adds labor and the cost of the coating to the equation, as well. There are a lot of companies that run multiple aqueous printers to keep up with demand, but have usually added automation in the finishing, department, such as coating machines and canvas stretching machines, which will be discussed in subsequent sections. Even with automation, the lag time between printing and shipping is an important consideration. The most important element in the cost-to-print equation is finishing since time and labor are the largest cost factors in the print process. Some studies of the cost-to-print put ink and media as less than 10 percent of the total operation costs.

**Maintenance:** Aqueous printers require little maintenance, other than keeping the production area as clean as possible.

**Operation:** They are virtually plug-and-play, so there is very little time lost tweaking the printers for different materials. Because of their relatively simple operation, they are the most reliable printers over the long haul. Moreover, with the more complicated latex, solvent and UV-curable printers the addition of a RIP (Raster Image Processor) software is necessary, requiring additional training and knowledge.

**Environment & Safety:** Aqueous is arguably the most environmentally-friendly wide-format printing technology, simply based on the fact that the inks are water-based. Aqueous ink cartridges are easier to recycle and re-use, which is a huge benefit both economically and environmentally. And, unlike most solvent-based and UV-curable printers, they do not need to be vented or filtered for a safe work environment. Print shop employees breathe easier when they’re using aqueous printers.

**Quality:** You typically get a nicer-looking print with a wider color gamut at production speeds than you do with other printing technologies. The wider the color gamut, however, the slower the print speed. When you’re researching printers, ask about speeds in the highest-quality mode.

**Applications:** Though aqueous is versatile enough for almost any application, including canvas, specialty applications like vehicle wraps are more difficult and time-consuming to accomplish than they are with solvent and latex printers (UV-curable printers are not ideal for vehicle graphics, or stretched canvas, since the ink tends to crack when stretched around corners or rivets and over stretcher bars in the case of canvas).

**Speed:** This is actually somewhat of a wash when compared to entry-level solvent printers, particularly with the latest technology, which prints about twice as fast as the previous generations. Basically, upgrading to any new printer – be it aqueous, solvent, latex or UV-curable – will increase production speed significantly.

**Printheads:** HP and Canon use thermal printheads, which don’t last as long as the piezo heads used in Epson’s printers and in most solvent printers. Fortunately, the cost of each thermal printhead is relatively low, and significantly lower than the cost to replace a piezo printhead.
Latex Layout

HP pioneered the use of latex inks in wide-format printing, and recently released its next generation of HP Latex 300-series printers. There are other latex printers out there, but HP’s Latex printers are the standard and best suited for canvas printing since you don’t need to coat the canvas after it’s been printed. Latex inks provide more durability and scratch resistance than aqueous inks and are touted as environmentally-friendly. For super-high production, the HP Latex 3000 provides all the benefits of latex printing, plus higher speeds at billboard-sized widths.

Cost: The cost for the new 64-inch wide printer (the HP Latex 360) is priced around $20,000, which offers the most quality and flexibility within the HP 300 series. Ink and media costs are about the same as they are for aqueous and solvent printers since latex inks work with many of these media types.

Operation: It takes awhile for the heating element on older latex printers to get to the right temperature for printing, but this time has been cut down dramatically with the new HP Latex 300 Series. With latex, you can laminate right away since the ink is dry and outgassed once printed.

Durability: As mentioned with solvent printing, the additional durability of the latex inks allows you to skip the coating step for most applications, though the customer may like the look of a coated print and request it.

Quality: The HP Latex 300 Series also promises to boost quality, inching ever closer to aqueous-quality levels. The fact is that most wide-format inkjet printers will produce the quality you need for high-volume décor canvas printing. If you have a pickier clientele for more custom canvas work, you should request samples from the manufacturer/distributor of the printer you’re interested in using files you supply them.

Environment and Safety: Prints produced with HP latex inks emit extremely low levels of VOCs. There is no special ventilation required to meet occupational exposure limits, and there are no requirements for air discharge permitting, according to HP.

Maintenance: Latex requires less maintenance than a solvent or UV-curable printer, but more than an aqueous printer, though the HP Latex 300 Series includes new features like a maintenance cartridge, instead of a maintenance tank, making maintenance easier and faster.
Solvent Solutions

Solvent printing was a godsend to the sign industry when it first arrived on the scene. Commercial sign makers were continually carping about outdoor durability and the lack of it before solvent printers were introduced to the signmaking scene.

Printer manufacturers rushed to meet this demand and developed a solvent ink set designed to permeate and penetrate vinyl. Aqueous inks are anchored to the surface by an inkjet coating, so the ink sits on the surface, making it less permanent. One way to look at this relationship between ink and vinyl is that solvent ink is like a tattoo and aqueous ink is more like a sticker.

Most of those early solvent inks were hard solvents that were rather caustic and as such could bite into just about any material. Since then, the industry has moved to low/eco solvent inks, so the media designed for these inks requires some sort of treatment or coating to ensure ink adhesion.

As such, more high-volume fine art and décor reproduction companies are migrating to solvent since it eliminates the need for post-print coating; just pick the canvas finish – gloss, satin or matte – and go straight to stretching and finishing.

There is a great range of printer types, from entry-level units that are 54-inch to 72-inch wide and cost between $15,000 and $25,000, to giant 16-foot super-high production printers that can cost up to half a million bucks.

For the purposes of the following solvent printer discussion, we’ll use the new Epson SureColor S70670 64-inch low-solvent printer as our benchmark, as it sits in that entry- to mid-level range, provides near-aqueous quality printing, and is similar in cost and overall capabilities to those in the same range manufactured by Mimaki, Roland, and Mutoh…
Solvent Solutions, Cont.

**Cost:** As mentioned earlier, solvent printers have a higher average entry cost. For typical operation, ink and media costs are generally lower than they are with aqueous printers. But again, media represents only a small percentage of a print operation's overall cost, so it's not a significant factor.

**Maintenance:** The latest generation of solvent printers typically require only an hour or less of maintenance once a month.

**Operation:** Outside of minor maintenance, solvent printers will run continuously and similar to an aqueous printer. However, there’s usually a recommended drying and outgassing time recommended before lamination based on the printer model.

**Durability:** Solvent prints are extremely durable, opening up a wider range of applications that don’t require lamination or coating, including canvas.

**Quality:** Solvent printers, particularly Epson’s, have made great strides in quality. Though you’re not likely to find the same quality as you will with aqueous printers, there are certain models that come very close to aqueous quality. It’s also important to keep in mind that quality is not only a function of the printer, but of the color management workflow and the media being printed to.

**Printheads:** Most solvent printers use piezo printheads, which are more durable and long-lasting than the thermal printheads typically found on aqueous printers (excepting Epson’s aqueous photo printers, which also use piezo heads).
Curing Time: UV-Curable Printers

For some, UV-curable printing represents the Holy Grail of sign printing because it’s the only wide-format technology that allows direct printing to board materials, such as Coroplast, Gator Board, Sintra, and even doors and tabletops. UV-curable inks are cured or set using UV lamps that are built into the printer so the inks adhere to more materials.

And, with the advent of hybrid UV-curable printers – those that can switch from flatbed to roll-to-roll, such as the HP Scitex FB500 – the printing potential becomes almost limitless. But with this seemingly limitless capability is an attendant complexity.

Moreover, UV-curable inks are generally not designed for the canvas printing process. The inks are simply not flexible enough for the stretching process, but should be fine for mounted, pre-stretched or framed canvas prints.

Applications: A UV-curable printer eliminates the painful application step for board applications; simply print and go. Almost everything, excepting vehicle graphics and stretched canvas, is fair game for a UV-curable printer, allowing more opportunities to make a difference with specialty graphics.

Durability: The durability of UV-curable rivals solvent, and rarely needs lamination, unless you’re looking for a different texture or more rigidity for roll materials.

Quality: For canvas printing, UV-curable printers are really a last resort. If the bulk of your work is direct-to-board printing and you have an occasional canvas project you could certainly do it, particularly if you aren’t planning to stretch and frame the canvas. Some shops print directly to a pre-stretched blank canvas, but in that case you have to paint the edges as most people expect either a gallery wrap (where the image continues onto the edges of the frame, usually mirrored) or a museum wrap (a solid color on the edges).
**Environment & Safety:** Though UV-curable printing usually requires an air filter, its emissions are not nearly as harmful or voluminous as typical solvent printing. The UV lights, however, can be harmful if you look directly at them, which is why the lights are enclosed and eye protection is recommended. From an environmental impact standpoint, the ability to print directly to rigid materials like Coroplast helps eliminate material waste.

**Cost:** Low-end UV-curable printers start at around $60,000 and range up to half a million dollars for a high-quality production printer. The hybrid HP Scitex FB500 and others like it were designed to strike a balance between economy, production and quality as the lower-end machines are not as sturdy and reliable, while the higher-end industrial printers represent an extraordinary capital investment. You can also use less-expensive uncoated materials and UV-curable inks are generally less expensive.

**Maintenance:** UV-curable printers require more detailed and time-consuming maintenance about once a month.

**Operation:** Because of the relative complexity of UV-curable printing, and the need to adjust the printhead height based on the material running through the printer, the variables in the process increase proportionately. Plus, you may need an additional operator, at least part time. High-performance, high-volume printers burn through material quickly, and the material used is often quite heavy. Where a roll of 36-inch wide material is easily loaded on an aqueous or solvent printer by one person, a 300 ft. roll of 60-inch material can weigh around 100 lbs., so someone else will need to be available to help load heavy materials or big boards onto the printer.
Coating & Finishing Canvas

As noted in the previous section about printer selection for canvas printing, it’s recommended that you coat all aqueous-inkjet canvas output. Coating also helps ensure a crack-free, consistent stretch for gallery wrap applications, and it’s important to coat before stretching.

If it’s a short-term application – like a temporary decorative piece – or when using a solvent or latex printer, coating is not necessary unless the customer wants the look of a coated canvas.

Typically, coatings come in either gloss or satin (luster) finishes. Gloss coatings are often used to not only provide additional protection, but to bring out the density of blacks and the vibrancy of the colors in the print.

For a more subdued look and particularly to cut down the glare from high-powered lighting, a satin or luster coating may be preferred. Some will choose not to coat the canvas at all to retain the unique texture and characteristics of the material.

Coatings are available in both spray (aerosol or industrial sprayer) and liquid (can). Sprays from Hahnemühle and Clearstar Corp., for instance, provide excellent results, though there are other brands available from other companies that specialize in fine-art and photo printing.

Stick with sprays and coatings that are specially formulated for this application, rather than those that are not tested specifically for inkjet prints (Krylon, for example), because the long-term effects of these off-the-shelf sprays on inkjet paper surfaces are unknown.

There are also liquid coating machines available in various widths from companies like Neschen and Marabu. While these machines automate the process and provide an excellent finished product, they require a controlled environment with consistent temperature and humidity, free from dust and dirt.

Liquid coatings that come in a can, such as Sunset Gloss and Sunset Satin Coatings, can be either rolled on or sprayed using an HVLP (high volume, low pressure) spray gun, which requires a well-ventilated dust-free area.

An HVLP spray gun wastes less coating in overspray than other types of sprayers. It also provides more control over the application process. Some print shops and studios simply don’t have space for spraying, or can’t justify buying specialized coating systems, which is why Sunset Coatings have been formulated to work equally well when applied with a spray gun, brush, or foam roller.

If you’re looking for a way to spray on a budget and in limited space, click here to see how Dan Johnson built a space- and money-saving spray booth for his studio.
When rolling coatings on canvas, follow these basic steps:

1. Start with a high-density, white foam roller and a tray that is typically used for holding paints. You can buy these products in the paint department of any home-improvement store. The high-density foam will help reduce bubbles. Use a larger-width roller if you plan to coat larger canvases.

2. Pour the coating into the tray and dip the roller in the coating until it is thoroughly wet, but not too wet.

3. Lay your print on a clean, dust-free board that is bigger than your print. The extra space on the surface around the print can be used to roll off excess liquid if you happen to oversaturate the roller.

4. Consider using two or three thinner coats, instead of one thicker coat.

5. Don’t try to coat the whole print at once. Start with one or two passes at the edge of the print.

6. If large bubbles appear, try blowing on the coating.

7. Make overlapping passes so you can maintain a wet edge and avoid lines and streaks.

8. Find the rolling pattern that works best for you. Some users prefer rolling in one direction only. They go up the print in one pass, and down the print in the second pass (like mowing a lawn).


10. If you are applying a second coat, allow the first coat to dry before applying the second coat. A thin coat should take between 10 and 30 minutes to dry. But it will take longer if you’re working in an environment with high humidity.

11. Allow the coated print to dry thoroughly before you pack it for shipping. Don’t try to speed up the drying process with a fan; allow the print to dry on its own.

12. Clean the rollers immediately after each use. Run cool water over the rollers immediately after use, and squeeze them until they run clear. Allow 10 to 15 minutes. If you keep the rollers clean, you can use them for about six months before you need to replace them.

A couple of important notes about coating canvas:

• Make sure the ink is dry before applying any coatings. A good rule of thumb is 24 hours. To test whether a print is ready for coating, some printmakers suggest this technique: Lay each print on a flat surface, then cover the print with inexpensive butcher paper. The evaporating glycols will cause ripples to appear in the butcher paper. Periodically replace the wavy butcher paper with a fresh sheet of paper. If no waves appear in the fresh sheet of paper after a few hours, the print will be dry enough to coat.

• Coat the print before stretching the canvas and wait at least six hours after applying the coating to stretch.

• As more inks and media types are introduced, it is impossible to predict the compatibility of every combination of media, ink and clear coat. Therefore, it is strongly recommended that you test before use. A test will immediately show any incompatibilities, including water sensitivity, inkjet receptive layer mud cracks, and ink bleeds. Generally, let the tested material dry for at least 24 hours. Evaluate the adhesion, flexibility, and visual appearance. Be realistic in your expectations and simulate the conditions to which the material will be exposed. Generally speaking, coatings formulated for wide format printing will work well with both aqueous and solvent prints.

Click here for a video demonstration of coating canvas with a roller.
Canvas Wrap Options

Before we get into the physical stretching and wrapping of canvas, this seems to be a good spot to discuss ways in which you can prepare the file before printing so that it’s ready to be rendered as a gallery or museum wrap. A gallery wrap, by the way, is where the image continues to bleed onto and over the edges. A museum wrap substitutes a solid border along the edges.

The trick is getting this right before you print. Fortunately, there are quite a few options…

**Photoshop Actions:** Typically, the Clone tool is the primary tool used to create a mirrored border. You can do this manually in Photoshop and then record your actions.

**Canon Layout Plug-In:** If you have a Canon iPF inkjet printer, the Layout Plug-In software features a tool that automates the process.

**OnOne Software, Perfect Resize 9:** Formerly known as Genuine Fractals, with Perfect Resize you can create selective, mirror, museum-wrap and other types of wrap borders.

**Qimage Ultimate:** This imaging software tool offers a number of ways to work with print borders. [Click here](#) to see how it’s done.

**Alien Skin Software:** Alien Skin’s Blow Up software comes with a free Photoshop Gallery Wrap Panel to make a solid border, reflected edges or reflected edges with a fade.

Typically, there are three ways a canvas print can be stretched: by hand, with stretcher bars and strainers; using canvas stretching machines that provide a range of automation, like the Tensador II and the more automated Canvas Master machines by GAPP Engineering; or using a do-it-yourself stretcher bar system.
Canvas Wrap Options, Cont.

Stretching canvas by hand can be very involved and time-consuming, but the raw materials needed are less expensive. For detailed step-by-step instructions by master printer, photographer and craftsman Ralph Cooksey-Talbot on creating your own stretcher bars and canvas frames, including the tools and materials necessary, click here.

While much more efficient for production, acquiring equipment like the Tensador II or the Canvas Master requires an initial investment ranging from about $3,000 to $11,000. If your volume supports the equipment purchase, definitely investigate these machines.

Armando Garcia, director of operations for Soicher Marin, a high-volume fine art reproduction company is Sarasota, Fla., says, “We use the Tensador for just about everything up to 60 inches. When you compare it to doing it by hand, the machine always wins out. I can't think of a situation where we wouldn't use the machine, unless it was an original canvas.”

Garcia adds that it usually takes one of their operators about a day and half to learn how to use the machine to its full potential and cuts the time needed to do a canvas wrap by anywhere from 30-50 percent.

The Canvas Stretch Master is more automated, thus it’s more expensive. However, it also produces about twice as many canvas wraps per hour than the Tensador II and the Canvas Studio Master, about 60 per hour on the high side, with less labor. To find out more about the setup and operation of the Studio Canvas Master and the Canvas Stretch Master, click to the videos below:

- **Studio Canvas Master Setup**
- **Studio Canvas Master Demonstration**
- **Canvas Stretch Master Setup**
- **Canvas Stretch Master Demonstration**
- **Corner Fold Options**

The third option is the use of a pre-made, DIY stretcher bar kit, like GOframe. This is a happy medium between stretching by hand and automating the process. Plus, it’s an inexpensive option, and GOframe’s patented corner clamps make it a quicker process that doesn’t require a lot of complicated measuring.

Once your canvas is printed, simply remove the adhesive strip on each of the appropriately sized bars; place the bars into the corner clamps, adhesive side up. Press the adhesive side onto the back of the canvas and remove the clamps (save them for your next canvas). Trim the canvas to the outside edge of the canvas bars, and slice the corners to fold them up to the slanted edges of the bars. If desired, run a bead of glue along the inside edge of the bars. Fold up the stretcher bars and place a corner pin into the pre-drilled holes. Reinforce the corners with strainers that snap into place.

To watch how simple it is to wrap a canvas using GOframe, please see the video below:

- **GOframe Canvas Stretching System**

High-quality adhesive tape eliminates the need for stretching pliers making stretching a gallery wrapped canvas a snap.

Reusable patented clamps ensure perfectly square frames while keeping the adhesive tape from touching the canvas.

U shaped fasteners allow the canvas to fold into the miter creating neat and perfectly folded corners.

Tabs easily snap into place to provide constant tension that creates a drumlike feel to the canvas.