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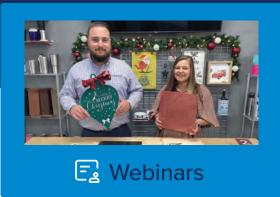


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### GRAPHICS PRO

## START HERE

VOLUME 37

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## STARTSHERE

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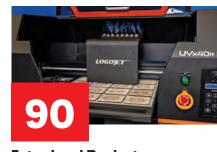
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## **A Different Kind of Show**

The inaugural START HERE Academy (SHA) was held in September during GRAPHICS PRO EXPO in Charlotte, North Carolina, Much like the magazine you're reading now, it's an event specifically tailored to those with an entrepreneurial spirit who wish to start or expand their business in the graphics industry.

Trade shows are great places to see new products on the market, bend the ear of distributors and manufacturers, and get a hands-on look at the machines we use to keep our business running. But SHA adds more.

On top of the trade show experience you've come to expect, SHA brings entrepreneurial influencers who share their experiences and lessons learned starting a new business or adding capabilities to tap new markets - the nuts and bolts of starting something new before you invest in equipment or expansion to make sure vou're making the right moves for your shop.

In addition to SHA, GRAPHICS PRO EXPO offers a bevy of 101-level, START HERElevel tutorial classes to choose from to get a leg up on making that next big move to keep your shop competitive and profitable.

START HERE-level classes taught at this year's GRAPHICS PRO EXPO included:

#### **START HERE ACADEMY**

**Indiana Convention Center** June 15-16, 2023

- Print on Purpose and Grow your Business Exponentially
- · Finding Success in the Laser Engraving Industry: Application Ideas and Tips to Boost Production
- · Screen Print with Just a Heat Press
- Starting Sublimation: What Do I Need?
- Become a Sandcarving Star!
- Printing Outside of the T-Shirt Box
- · Everyone Can Learn CorelDRAW

Some of the feedback we received from attendees let us know that START HERE Academy is providing a forum that industry professionals can truly use to improve their products, processes and acumen as a businessperson:

"Engaging and real." — "Info I can use immediately." — "Relatable and genuine." — "Very informative for business owners at every level."

GRAPHICS PRO EXPO is the perfect place to start your search for that new profit center for your business. For the full lineup of events in 2023, go to graphicspro-expo.com. And, be sure not to miss the 2023 SHA event starting June 15 at GRAPHICS PRO EXPO in Indianapolis at the Indiana Convention Center. Registration opens March 10. See you there!





WANT TO KNOW MORE? Feel free to give me a call directly at 720-566-7286 or email me at mdixon@nbm.com.

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## **Apparel Decorating**

Machines to help you start fast out of the gate



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Paula Aven Gladych is a freelance writer based in Denver, Colorado. She can be reached at

By Paula Aven Gladych

t's easier than ever for small shops and startups to get into apparel decorating. Not only has the technology improved

greatly over the years, but mom and pops can get into the busi-

pgladych@gmail.com.

The first step to starting an apparel decorating business is to determine what type of apparel decorating you want to do. Is it T-shirts and ball caps or do you want to design your own clothing line for a pop-up shop in a mall? Sign shops are in a perfect position to branch out into apparel because they are already familiar with graphic design programs and printing equipment so the learning curve won't be as steep and they already have a customer base in which to cross-sell different printing applications.

Many new businesses start out small. They buy a small screen printer or direct-to-garment machine and install it in their garage. As their business grows, so does the type of equipment they have on hand and the space necessary to meet the demands of their customers.

Traditional screen printing is still just as popular as ever, particularly for print runs over 500 garments, but direct-to-garment and direct-to-film printers are becoming more available and more affordable as companies scramble to tap into the growth in e-commerce that was fueled by the pandemic over the past two years.

More and more, individuals and businesses are doing their shopping online. In many cases, they want to purchase small runs of printed apparel and have them delivered quickly and efficiently with the click of a button. In this case, direct-to-garment or direct-to-film equipment makes the most sense because a shop doesn't need a lot of space to run them, they are easy to learn, don't require screens, solvents, and chemicals to produce a good product, and are perfect for any size order.

#### **SCREEN PRINTING STILL KING**

To get into screen printing, all someone needs is enough space for a small manual screen-printing press and a small dryer to get started. They also would need an exposure unit for making a screen and a flash curer to spot dry ink before you send it to the dryer, says Taylor Landesman, vice president of Lawson Screen & Digital Products.





Traditional screen printing is still just as popular as ever, particularly for print runs over 500 garments. (Image courtesy Xpresscreen)

"You need to understand art and art programs and understand screen printing," says Jay Doub, sales and technical service representative for Xpresscreen. "Both are learning curves."

The beauty of choosing a program like CorelDRAW or Adobe Illustrator is that there are plenty of resources available to help get a new shop owner up to speed on how to use them, from community college courses to online instructional videos.

Shops also can save money by building their own darkroom and light table. He suggests that new shops buy at least a four platen, four hit press so that they can print white and three other colors. "Anything less is kind of a novelty," he says. "I don't see the point in it. They're not expensive and it will make money for you."

If a shop is printing a white base on a dark shirt, a flash curer is imperative to dry that layer to the touch before adding colors on top. That could be as simple as pointing a hot air gun at the image to dry it by hand or purchasing a flash curer that can do the job in nine seconds.

Many shops don't realize that they can screen print their own transfers. Where that comes in handy is when printing shirts for sports teams. Inevitably, a team will come back to the shop and ask for additional shirts because they had some late signups. By screen printing heat transfers with the team logo during the first printing of shirts, the shop won't have to go through the hassle of making new screens when additional shirts are needed. They can just heat press the design onto the new shirts.

To get into screen printing, all someone needs is enough space for a small manual screen-printing press and a small dryer to get started.





Along with a heat press, screen-printing shops should also invest in a spot removal gun.



Along with a heat press, screen-printing shops should also invest in a spot removal gun for when they accidentally get an inky thumbprint on a sleeve and they don't want to have to

"If you have no clients, no customers, it is easier to start out with as little overhead as possible," Doub says. But if the shop is already an established embroidery company, for instance, that has been outsourcing its screen printing to a contract decorator for 10 years, it might make economic sense for them to buy their own screen-printing equipment and start handling those jobs internally.

Many people just getting into the industry get fooled by equipment vendors and distributors pushing how cheap it is to get into apparel decorating, but they don't understand that there are other costs involved besides the cost of the press and heat press, says Nathan Belz, COO of Impress Designs outside of Dallas.

For screen printing, it takes inks, squeegees, screens, a good computer, monthly subscription to a RIP program and chemicals for emulsion. Someone can get into it for \$500 to \$1,000, but "if they are trying to do any kind of good setup, a good home setup beyond being a hobbyist, \$5,000 would get you into something," says Belz. That cost doesn't include training and getting up to speed.

If apparel decorating is going to be your actual job, most people would agree that it is important to start out with good quality equipment "otherwise you will be paying the price. Bad equipment doesn't have resale value. It is trash when you are done with it," he argues. If a shop spends a bit more money on name brand equipment, even if the shop doesn't last long, the equipment can still be sold so it isn't money down the drain.

Another benefit of buying good equipment to start is that reputable shops typically offer training and troubleshooting if something goes wrong.





Image courtesy Xpresscreen

If apparel decorating is going to be your actual job, most people would agree that it is important to start out with good quality equipment.







Xpresscreen developed MiScreen, a direct-to-screen thermal screen exposure unit which images directly from a computer to a special thermal screen, eliminating the need for chemicals, emulsions or water, keeping costs down and improving setup times. The only drawback of the technology is that the screens aren't as "rock solid" as conventional screens, so they are only good for 750 to 1,500 impressions. Most shops do jobs less than 500 shirts, so these screens are a more economical option, Doub says.

#### **DIRECT-TO-GARMENT & HEAT-APPLIED GRAPHICS**

Many pop-up hobbyists have surfaced, peddling their own brands of apparel decorating using some of the newer technologies, such as heat transfer vinyl, which has gotten significantly cheaper, or heat transferable film. Both technologies are similar to direct-to-garment, only the design is printed on film or vinyl and then pressed into the garment using heat.

"DTG has made great strides. There's more flexibility but there is a learning curve to get involved in that," says Belz.

A small shop can get into heat transfer vinyl with a 24" printer and a heat press. To make things even more unique, they can add a single-head embroidery machine to the operation. If a shop wants to digitize their own files, they will need a decent computer and a graphics program.

Belz says that many shops will focus on one type of printing, whether it is screen printing or DTG, but "will outsource to someone like us. We are a high-volume contract decorator doing eight million shirts per year." They can handle the smaller apparel decorating orders and outsource the larger jobs to companies with automated equipment that can complete jobs more quickly.

To print 500 shirts, it may take a shop a day or two if they are using a manual press. Belz explains, "We can do it in an hour. A lot of the time we can do that cheaper than they can. They sign us up as a contract decorator to do stuff outside their normal forte and they can still be full service and handle the part they are good at."

He adds that if a shop outsources some of the larger screen printing or direct-to-garment print jobs, it makes more room in their shop for heat-applied graphics, an embroidery machine, or

#### **6 Quick Tips for Getting Started**

a cutter to cut vinyl decals and stickers.

"The apparel market is growing, especially the ability to do this at home and to sell online. It is really rising. Before, people would have shops and storefronts and sell shirts that way but e-commerce has been taking off and only really accelerated with COVID and everyone staying at home. There are more and more opportunities to sell online, to specialize," says Landesman.

A small shop can get into DTG for between \$16,000 and \$18,000, he says. That includes the printer, a pretreat sprayer and a heat press or conveyer dryer. Unlike screen printing, which can print on just about anything, DTG printers work best with 100% cotton and certain cotton blends.

Vinyl is another decoration option that doesn't cost too much upfront. There are machines out there that print on vinyl and then cut it out, making it simple to apply to garments with a heat press.

Most shops do both screen printing and DTG, using the DTG for smaller production runs and screen printing for the really big runs.

"They each have their own niche and complement each other really well but, as DTG develops, certainly it is the wave of the future, we are not quite ready to replace screen printing yet," he adds.

People wanting to produce their own clothing line will need a pad printer to put in neck labels or a way to sew in neck labels. Shops can also use heat transfers to put in neck labels.

"I would say, after doing this for decades, the most common problem new people have is figuring out how to price or charge for what they're doing," Belz concludes. "Understanding what you are going to charge and how much time it will take and how much energy are all really important. It all revolves around knowing who your audience is."

Supply Basics for Screen Printing https://gpro.link/spbasics

- 1. When purchasing your equipment, buy the best you can afford, but if you can't, buy the least expensive equipment that will allow you to get by until you have enough to buy the best.
- 2. Put in an integrated registration system that allows you to start in the art department, work through the screen department and finish in the production department, where the placement of a design is controlled from start to finish.
- 3. Have a proper order form. A good order form is one that has all the information for a job to go through the entire shop without anyone having questions.
- 4. Document everything about every job you do so that if a reorder is required, you have all the information needed to duplicate it.
- 5. Set your pricing based on your costs and overhead, not what some other shop charges.
- 6. If you're going to work out of your garage or somewhere where you don't have much overhead, price your printing as though you were paying for commercial space so if down the road you move into a commercial space, you don't have to change your pricing.



# 

## GET CONNECTED IN 2023 AT GPX!

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March 9-10, 2023

Education Day March 8

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Charlotte Convention Center
April 27-28, 2023
Education Day April 26

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for note letter to the letter



## STARES ERE CADEMY

#### Like what you see in START HERE?

In June 2023, join us at GRAPHICS PRO EXPO in Indianapolis, IN for our second annual 101-level educational conference. This night-school style conference provides valuable start-up resources, information, education, and production methods for apparel decoration, personalization, signage, wide-format printing, and more.

Whether you're new to the business or looking to add a new profitable process to your mix, START HERE Academy provides the tools you need to succeed.





Indianapolis, IN
June 14, 2023
4-8 p.m. ET
Stay tuned for more details

## FLEXIBLE PRINT PRODUCTION

**By Ginny Mumm** 

Amber Bowie, owner of a custom T-shirt and sticker business, tells all



All images courtesy MM & Co Print Shop



Ginny Mumm is a freelance consultant for Roland DGA.

Amber Bowie has always had an entrepreneurial spirit. While she was in college, she made and sold her own line of jewelry. So, when her youngest daughter, Mackenzie, was born with a congenital heart defect, Bowie decided to start a business that would allow her to stay home with her girls. In 2015, she launched Mackenzie Madison of Philadelphia (MMofPhilly.com), offering handcrafted children's clothing and specializing in Mommy & Me outfits. During COVID, she added MM & Co Print Shop – an offshoot business selling custom and personalized T-shirts and stickers online and through boutiques.

Amber shares her experience being a "mompreneur," the benefits of adding print production capability, info on her popular online videos, and new directions she's considering for her businesses.

#### You were already a successful business owner, what made you decide to add print production?

**AB:** MM & Co Print Shop is a natural extension of my children's clothing boutique, Mackenzie Madison of Philadelphia. Being a "mompreneur" while at home with my girls allows me to brainstorm the type of business I want to start and then diveright in! MM & Co. Print Shop came about in 2020 during COVID. I shared my T-shirts and decal creations on TikTok, and they were well received.

#### What products do you sell through MM & Co Print Shop?

We offer logos, decals, cup wraps, stickers, pattern vinyl, and HTV transfers. One of our top sellers, and a favorite to make, is our kids' Black historians T-shirt, offered through our children's clothing brand, MMofPhilly.com.

#### Where are your products sold?

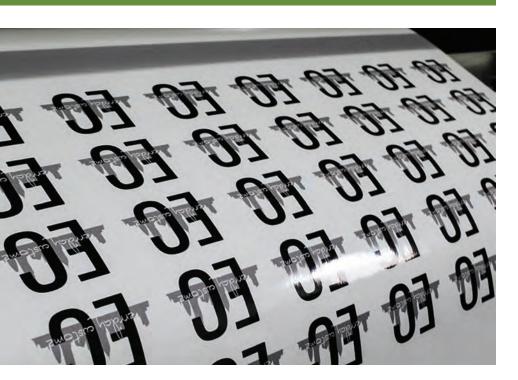
Our products are sold mostly online, through our website and Etsy shop. We also sell wholesale to boutiques throughout the U.S. and Canada. In addition, we attend a few craft shows throughout the year here in Philadelphia.



We offer logos, decals, cup wraps, stickers, pattern vinyl, and HTV transfers.



We're very busy in the spring for Mother's Day and Father's Day, and there's plenty of demand, of course, during the holiday season!



#### How do you handle peak production times?

My husband and I are able to manage our business most of the year, however we do have two part-time employees who come on during our busier seasons. We're very busy in the spring for Mother's Day and Father's Day, and there's plenty of demand, of course, during the holiday season! We enjoy the flexibility of being able to work from home and homeschool our girls. Our basement is our "headquarters," which holds our machines, heat presses, and inventory.

## Which of your products are most popular right now? Any particular design trends you are seeing?

Spooky season is hitting us very early this year! We're selling lots of fall and Halloween-themed Ts. Heading into fall, the trends I'm seeing are very nostalgic – a lot of '90s looks and preppy looks – all of the things that speak to my millennial heart.

#### How did you choose your print production equipment?

While researching printer options, I looked into sublimation printers as well as Roland DG's VersaStudio BN-20 eco-solvent printer/cutter. I loved that the BN-20 could print on any color of 100% cotton. As an owner of a kid's clothing boutique and as a mom, I look for comfort and quality when buying clothing for my children. I wanted to be sure I offered the same in my store.

#### How easy is it to use?

The BN-20 has been a game changer! There was a bit of a learning curve when it came to preparing the artwork for the VersaWorks RIP software and getting familiar with a new machine, but it has been fairly easy to learn and maintain, and the print quality has been great.

#### You have used blogs and videos to share your production tips. How have they been received?

I love sharing. When I started MM & Co Print Shop, I received a lot of questions about the BN-20 and how I was using it to make my T-shirts. Back then, there wasn't a huge community, so it has been great to see it all grow so quickly! I've been told that my blogs and videos are very helpful for new owners. I am sure I have turned many of my followers into BN-20 owners! My videos that share workflow tips seem to do the best, like this one on how to apply masking tape – <a href="https://gpro.link/masking">https://gpro.link/masking</a>.

#### What do you think sets your business apart from your competition?

The marketplace is very crowded. I think what sets MMofPhilly.com and MMandCoPrintShop.com apart is our values and beliefs. MMofPhilly.com is all about celebrating motherhood, which is an important time in a lot of women's lives. Motherhood can be exhausting and challenging, but it is also fun and exciting! MMandCoPrintShop.com has been such an exciting venture for me. In addition to the business' success, I truly enjoy connecting with other crafters and mostly momowned small business owners. I believe our products and customer service are the reason our customers keep coming back.

#### Are you looking to expand any particular areas of your business?

Yes! We are planning to expand the range of designs we produce on our BN-20 printer/cutter and possibly add DTG capability as well. Check out our designs at <a href="https://www.mmandcoprintshop.com">www.mmandcoprintshop.com</a> and <a href="https://www.mmofphilly.com">www.mmofphilly.com</a>.



#### Why Stickers Make the Perfect Add-On Product

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https://gpro.link/stickers





## EMPLOYEE TRAINING TIPS

## for Screen-Printing Shops

By Josh Kice

Foster employee retention and establish quality in your production processes



You need to paint a very clear picture of Point A, Point B, and any steps in between, that you feel are an absolute "do as I do." (All images courtesy Josh Kice)

Josh Kice is a 10-year screenprinting vet out of Denver,
Colorado. He's worked in
small to mid-sized shops
throughout that time. In
his 10 years of printing and
designing, Josh volunteered
as a firefighter in Golden,
Colorado, for a brief stint where
he developed his business idea and model for

Ink & Drink, a DIY screen-printing bar based in

Denver's Santa Fe Art District.

Abe Lincoln is quoted as saying, "Give me six hours to chop down a tree, I would spend the first four sharpening the axe." When you are starting up a new business or taking on a new segment of the industry, training employees and yourself should be that early preparation that you make before you start chopping away.

Whether you just hired someone on, a team member got promoted, or a spouse is stepping in to help with an increased production schedule, it is so important to have the right tools to train someone in the printing industry.

#### MAKING MISTAKES

This is a hands-on industry. Get your new hires (Joe, we'll call him), or promoted employees (Kate, as we'll call her), hands on as early as you can and as often as you can! There will be mistakes made. Allow mistakes to happen and react to them calmly.

How you react when someone is training will dictate how they react to every mistake they make after that. If you can approach mistakes as a chance to learn something and get better, it instills that same mindset in someone who is starting something new.



This is a hands-on industry. Get your new hires or promoted employees hands on as early and often as you can.

We know, from our own experience, to expect a higher misprint percentage with a new printer compared to a long-term employee. Order a couple extra garments more than you normally would and tell them that they have four (or close to) shirts to test with before their production run starts. This will help get them started with less pressure, and if they nail the first four shirts, you can save the same amount out of the production run (unprinted) for the next order and now they have the same buffer without needing to order extras again.

#### **REPEAT & RETHINK**

You need to paint a very clear picture of Point A, Point B, and any steps in between, that you feel are an absolute "do as I do." Ideally, we have our new team members, Joe and Kate, mimicking what we are doing, exactly, until they can repeat all the steps consistently without questioning them or missing them.

We have to recognize – as the trainer, owner or system writer – that not everyone thinks exactly how we do. By the time Joe or Kate has been able to replicate our procedure, they have probably already thought of three areas where they want the process to change for varying reasons. We must encourage this mindset, but we must encourage it at the right time and in the right way.

We explain to Kate and Joe that they are proficient in repeating these steps as they have been taught, and we encourage them to use them without our constant supervision now. We must also tell them, now that they know our process, they have the right It is so important to have the right tools to train someone in the printing industry.



By the time your employee has been able to replicate your procedure, they have probably already thought of three areas where they want the process to change for varying reasons.

## The five P's: patience, practice, persistence, practicality, patience.



To help new hires get used to printing, order a couple extra garments more than you normally would and tell them they have four or so shirts to test with before their production run starts.

to make it their own – to put some Kate Care into it, or some Joe Flow.

We need to state that when they want to test a system, they must provide their own additional garments to do the testing on to initiate a production run. That same four to five extra Ts we provided them before are now on them to provide to test their own systems. This puts additional ownership into their hands for their own systems.

It also forces Joe and Kate to reality check some of their ideas a little bit harder before trying them, hoping to avoid the employee who will gladly just sit around and challenge what you have in place and "freelance" their own methods nonstop "because it's more fun to do it differently every time."

#### TEST DAYS

We, as the trainer/owner/supervisor also want to be there for them while they test their ideas. This is so essential that I highly recommend scheduling a "test day" when they share a new idea with you. Here's the kicker: make it soon, and *do not cancel* on them! Make their idea a priority; otherwise, you've just blown smoke to them and don't back up your words.

Why do training members need to be there? Joe and Kate have what they feel is a great idea, but likely don't have the skill or knowledge to implement it. You can be there to direct their discoveries along the way, answer questions on how this new technique might be best implemented and learn more about your new hire.

#### **WAYS TO TRAIN**

Something we can do as trainers for these positions is to train ourselves. We have our personal learning style, and we likely teach to match our own learning style. Not everyone learns the same. We should grant ourselves the time to develop our lessons in several ways, like written, spoken, enacted, and directed/guided.

Written lessons work great via a handbook with step-by-step processes you implement in your shop. Spoken lessons might be verbally explaining everything in your written step-by-step.



Enacted would be lessons where you are hands-on and showing trainees the elements you want them to learn. Spoken and enacted could both be made into a video that can be used over and over without taking time away from your schedule.

Lastly, directed/guided lessons would be explaining every step while your trainee is acting out what you're teaching them in the moment.

The sooner we can have each of these teaching methods ready to go, the easier time we will have onboarding any type of learner, making them so much more likely to be retained as an employee for a healthy amount of time.

#### **REEVALUATE YOUR SYSTEMS**

We need to make sure we take the time to test our systems. There is function in

redeveloping company procedures. Feel free to take input or ask assistance from active employees and especially people who have been trained on the more recent side of things. They will have the most vigor toward helping and will have the freshest memory and input to what your system is like. Remember, we told everyone to create their own system within ours.

Also remember that you were new once. The five P's to this are as follows: patience, practice, persistence, practicality, patience.

Ideally, you have a chance to bring someone on board in preparation for an increase in production. That would allow time to be picky about your hire and time to train without things being needed yesterday. When do things ever go to plan though?

## **Checklist for Taking Orders**

By Chris Slivar and Elsie Acevedo, Deluxe Screen Printing

To be a successful screen-printing shop, you need to have the process of taking customer orders down to a science. Cross your T's and dot your I's. Your checklist for placing an order should include:

- Graphic file
- Blanks
- Quantity
- Ink type
- Pantones
- Due date

For a breakdown of each item on this checklist, visit <a href="https://gpro.link/checklist">https://gpro.link/checklist</a>.



### Reasons to Get Started in

## DTG Printing

By Robert Zoch

#### Now could be the right time to add DTG to your business



Robert Zoch is the global content manager for Kornit Digital, which develops and markets digital textile print systems enabling on-demand production. Before joining Kornit in 2017, he held various marketing, public relations, and editorial roles with NICE Systems and Lexmark International.

o matter if your business is screen printing, dye-sublimation, or even commercial print, you've undoubtedly been impacted by commerce migrating to the internet. This new normal presents several compelling reasons why now is an ideal time to introduce efficient, eco-friendly, digital direct-to-garment (DTG) printing into your production environment.

#### DTG offers a versatile safeguard against vulnerability

If community organizations, school activities, large-scale events, and sports constituted your "bread and butter" business, shutdowns probably hurt your shop. Demand for your services might've vanished, and if you printed pieces that you expected to sell, you might've been left holding worthless inventory. With DTG,

you can print quickly and on-demand, only producing pieces you've already sold. In many cases during COVID, on-demand printing shops repurposed their production floor to supply protective facial masks and fulfill other unforeseen needs. DTG means eliminating inventory risk and adapting to capitalize on new opportunities that arise.

## E-commerce is exploding, and digital production aligns perfectly with a digitized marketplace

We've long watched the "retail apocalypse" of traditional brick-and-mortar business models unfold, and a three-month period in 2020 doubled the volume of e-commerce for the preceding 10 years. By 2024, it's predicted that two-thirds of apparel in the U.S. will be purchased online.





## DTG is fast, a production solution capable of delivering imprinted gear at the speed today's buyers have come to expect.



Image courtesy Kornit Digital



#### **Pricing Guide for DTG Prints**

Adam Tipre, DTG Connection, shares five questions to keep top of mind when creating your pricing strategy. https://gpro.link/pricingdtg DTG is fast, a production solution capable of delivering imprinted gear at the speed today's buyers have come to expect. Furthermore, available workflow solutions offer end-to-end visibility and control, integrating POS, product catalogs, production floor, and shipping logistics to enable streamlined, cost-effective operations and superior customer experience.

#### DTG speed and efficiency mean capitalizing on social listening

Today's consumers express themselves via social media and online marketplaces. Fast fashion, micro-moments, and instant gratification are the norm. DTG means you can produce to meet demand resulting from events, causes, and thought leadership in real-time. Recreate images and memes in photorealistic detail. Any inspiration appearing on Etsy can appear on a garment; DTG fulfillers can meet that need for private creators and creative online entrepreneurs.

## Consumers demand responsible production practices, and DTG delivers

By eliminating inventory waste, removing harmful plastisol and byproducts from production, using a water-based pigment chemistry, and optimizing productivity relative to floor space, DTG answers the widespread demand for safe, sustainable, eco-friendly (low carbon footprint) practices without sacrificing quality or profitability.

#### DTG is a proven vehicle for profitability and growth

Supplementing screens with DTG makes every order profitable; screens handle the large, low-color jobs, while DTG handles complex designs in any color, in any quantity, on multiple fabrics, for a low and consistent cost to ensure profitability.

When you can take every job, you can capitalize on every opportunity. Waste less, and every resource — labor, capital, and materials — generates profit for your shop. I've visited countless print businesses that have grown at a staggering pace by supplementing e-commerce with DTG production.



#### **Choosing the Right T for DTG**

By Paul Crocker, DTG Connection

Printing is subjective to you and your customer. It is always important to keep perspective of what the end-user wants. Your goal is to produce quality garments that customers want to buy. Keep this in mind when selecting the ideal garment for your customers. Ask yourself these four questions:

- · Does the garment meet my customer's needs regarding look and feel?
  - Am I able to print a good print that will hold up in the wash?
- · Am I able to purchase the blanks, pay for labor, and sell at an acceptable margin?

· Will my customer buy the garment and be happy with their purchase after the wash?

If you can answer yes to all these questions, then it's a success! Don't fall into the trap of nitpicking your output to such an extent that no customer will ever notice the slight variations between the brands of T-shirts. If it works for you and your customer, then who cares what the so-called experts say online. Learn more at https://gpro.link/shirtsdtg.



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#### START DOING MORE WITH YOUR

## HEAT PRESS

Add hoodies, socks, metal blanks, and more to your offerings

**By Greg Farmer** 





So, you've got yourself a heat press, and you've figured out how much business you can generate by using transfers to decorate T-shirts. That's fantastic! And some of you are happy to continue running your custom T-shirt business and generating income that way. Others might say, "OK, what's next?"

Here is the good news: You can print more than just T-shirts with your heat press. In this article, we'll review a few of the additional items we'd recommend trying out. Remember, any time you are using a new substrate, we recommend going through the testing process again to ensure you have the correct heat and pressure. You may also want to use different types of transfers for different substrates.

#### **HOODIES AND JACKETS**

Hoodies and jackets are easy add-ons to your T-shirt business. Printing these items, depending on the material, can be very similar to printing a T-shirt. One thing to keep in mind with printing thicker garments is that you need a heat press with proper clearance. If you are looking to print in higher volumes, we recommend graduating to an automatic machine.

#### **BAGS**

Accessories like bags are always in demand with consumers and being able to customize them will give you a leg up over your competition. Sports bags, school bags, travel bags, fashion bags





When printing the different materials found in bags, it is imperative to do proper testing and ensure you have the best type of transfer for the job. (Image courtesy Howard Custom Transfers)

"Remember, any time you are using a new substrate, we recommend going through the testing process again to ensure you have the correct heat and pressure."

Image courtesy Insta Graphic Systems

graphics-pro.com

— the list goes on. When printing the different materials found in bags, it is imperative to do proper testing and ensure you have the best type of transfer for the job. It is also key to choose a press that allows space for the undecorated portion of the bag to hang down out of the way. For larger transfers, a swing-away design provides the space needed to properly prepare the bag and transfer for application.

#### **SOCKS**

Football

YOUR TEAM

Who doesn't love unique, customprinted socks?! Socks are a fun way to make a fashion statement and express yourself, so it's no wonder consumers are demanding special designs. Since socks are relatively small compared to items like T-shirts and hoodies, you can often fit multiple pairs at once on your press. This will help you crank out the volume when needed.

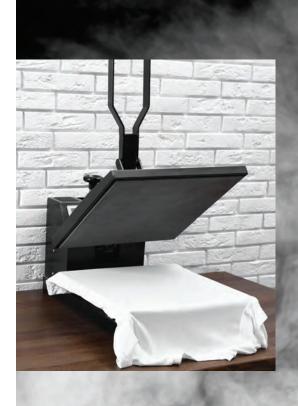
#### **WOOD AND METAL ITEMS**

You may not have known this, but you can print onto materials like wood, marble, and metal with your heat press. It's especially important to get testing done for these types of substrates, and it's also important to ensure your heat press has enough clearance to evenly print on thicker items.

Sheets of metal or pieces of wood can be printed on to create wall hangings, artwork, or custom plaques. This business can be high margin if you find the right niche and create a quality product. For printing on large metal, marble, or wood surfaces, we recommend a large-format machine.

Are you ready to take your customization business to the next level? Once you've mastered T-shirts, there is a whole world of products to move on to.

Socks are relatively small compared to T-shirts and hoodies, so you can often fit multiple pairs at once on your press. (Images courtesy Sockprints)



## How can one determine the correct temperature of their heat press?

It is suggested to use a thermocouple to check the temperature of your heat press. You can purchase a basic one for around \$25. Just because your temperature gauge on your heat press says it is a certain temperature, doesn't mean that it is that temperature. Without correct temperatures, you will have a hard time getting correct results.

- Kevin Lumberg, sublimation industry pro





## 100% DTG-READY RIGHT OUT OF THE BOX

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## Tips for Taking Your

## Embroidery

### from Craft to Commercial

The craft and commercial embroidery markets can learn a lot from each other

By Erich Campbell



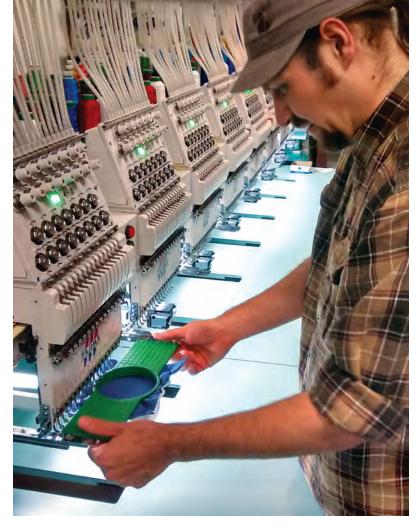
Erich Campbell boasts 20+ years of industry experience as an award-winning embroidery digitizer and designer, e-commerce lead, and project manager. He's an educator, teaching at trade shows, writing for industry publications, and hosting his weekly live show, The Takeup.

With so many machine manufacturers, software suppliers, and material vendors realizing the potential of the hobbyist and home decorator market, we aren't only seeing an expansion of professional products moving into the craft side of the market but also an influx of increasingly capable and well-appointed small shops working their way into the professional embroidery market.

Machine embroidery hobbyists and artists deciding to enter the business sphere have a very different initial experience than



A run of uniform shirts on a multihead machine. (All images courtesy Erich Campbell)







At the intersection between the work you love to do and the money you need to survive, there's a blessed state of existence.



commercial embroiderers. They usually run on slower, single-needle machines, changing colors manually throughout designs, running one piece at a time, spending dedicated hours as entertainment rather than employment. They dedicate themselves diligently to self-education and experimentation, mainly focusing on the look of the work. Their early work is more concerned with what they can make their machines do rather than how it was achieved or how long pieces take to create.

In short, commercial-only embroiderers tend to be efficiency-minded and production-focused, but that focus can sometimes lead us to standardize settings and materials. Home embroiderers tend to be experimenters and mavericks but may spend more time on a piece in the name of its appearance than a commercial job can afford.

Let's take the best of both worlds. We can make ourselves embroiderers who relish experimentation and creativity but know how to make it efficient and easy to produce, all while making the money it takes to keep us doing what we love.

To my commercial contemporaries, my greatest tip for you is to keep playing. Take at least one hour, if not a few hours, to try something new, experiment with a wild idea, or even lurk in some home embroidery and fiber-arts circles just to get inspired. For my crafty converts, your tips are a little more explicit.

As a writer and educator, I've been privy to hundreds of questions from erstwhile embroiderers making their way from a love of stitches to a lifetime in the business. Those Q&A sessions reliably bring out some of the same tips. Take them to heart as you start your commercial adventure.

#### BE READY TO DO BUSINESS

If you don't like talking about or handling money matters, can't stand sales or marketing, don't like serving people, and never take a second glance at the calendar, you'll either need to find out how to enjoy this vital work or find and pay a partner who does.

Making money means shuffling some paper in the process. You may not need to



When setting your price, you need to know what it costs to run your machine, keep a roof over your head, and roughly know your costs for materials.





To my commercial contemporaries, my greatest tip for you is to keep playing. Take at least one hour, if not a few hours, to try something new, experiment with a wild idea, or even lurk in some home embroidery and fiber-arts circles just to get inspired.

be a biz-dev wizard or memorize the tax code, but the off-the-cuff costing, pricing, and money management that often happens when you only do occasional commissioned craft projects isn't a long-term strategy for running a business. Do your research, look for resources that help people starting small businesses, find mentors in your local community, and be ready to hire out the critical things you can't do.

#### FIND YOUR FOCUS

You can be pulled in myriad directions by each creative project's possibilities. Though experimentation is good, not every project, product, or technique is meant to be part of your business. Define your target customer's needs, play to your strengths, and focus on things that fit that mold, especially while you are establishing yourself in business.

Always question new ventures requiring an equipment purchase. If you aren't profitable with your existing equipment and the new market and its processes are unclear, give some attention to your core work before taking on the expense. Adding equipment or techniques can enhance your offerings and profit, but you don't always need the newest item to bolster your business. You must know to whom you'd sell a new product or process well before you buy-in.

#### KNOW YOUR COSTS

Many early commercial embroiderers underprice their work because they feel unsure of their skills, doing so at the peril of their businesses. This is especially true when they've made capital investments and have regular lease payments looming. When setting your price, you need to know what it costs to run your machine, keep a roof over your head, and roughly know your costs for materials. You must estimate how much time is involved in each job and calculate a price that not only accounts for costs but pays you a wage for the work you do and includes profit for the business. You can't do that adequately if you don't know your costs in materials, overhead, and time.

"We can make ourselves embroiderers who relish experimentation and creativity but know how to make it efficient and easy to produce, all while making the money it takes to keep us doing what we love."

#### ASK FOR WHAT YOU'RE WORTH

Truthfully, it's not audacious, but you'd think it was from how hesitant new embroiderers often are to ask a fair price. Don't undervalue your labor or discount it randomly. Value your work and expertise. You are exchanging your expert technical knowledge, creativity, dedication, service, and the use of your uncommon and expensive machinery and supplies for the price you are asking.

Price on more than the material value and time spent laboring. Price on the value you provide and the value your customer perceives. It's the money that makes it possible to keep doing what you love.

#### SELLING ISN'T SELLING OUT

Sales isn't a dirty word. If you are doing good work, telling people about it is a service. You are doing the world a disservice if you won't show them what they might be missing. You provide a product and service that gives measurable value. Sales don't have to be shifty when you simply share a good product from which your audience stands to benefit. Show them the benefit, how it

can help their lives, businesses, teams, and groups, and give them the chance to make you their friend in the industry.

#### SET FIRM BOUNDARIES

Particularly for home-based businesses, it's hard to physically and mentally separate work and home life. Start early with dedicated business hours, using a second phone or service as well as a dedicated email address for business-only contact channels, and by physically keeping your work in a designated space, if possible.

It's good to grind, and you'll often work long hours, but don't let customers dominate your off-time or personal space. Though you can choose to work whatever hours you like, your early boundary setting will keep you from being always on-call.

At the intersection between the work you love to do and the money you need to survive, there's a blessed state of existence. If you can dig in and do business, understand the needs of your market, and charge a fair but properly profit-conscious price, you'll be well on your way to living there. Learn from commercial workers' experience, but don't be afraid to share your perspective too. Together, we can be more than we could have been apart.



# GETTING STARTED IN

# SUBLIMATION

By Michael Kaminsky

#### Why sublimation makes sense for any print and customization business



Michael Kaminsky is the CFO at Sublimation101 in Branchburg, New Jersey. He has been with the company since June 2015 and practicing sublimation for over 25 years. He's led training classes at THE NBM SHOW (now GRAPHICS PRO EXPO) since 2000.

Sublimation is a printing industry that has evolved over the last 30 years, starting as a ribbon printer and moving to an inkjet printer – initially designed for the photo gift industry for items like mugs, shirts, posters, and even magazine covers with your image on them.

Now, it has a horizon of thousands of products for the ad specialty, promotional, and fundraiser marketplaces — with the ability to produce these items instantly!

#### **PHOTO GIFTING**

One reason for adding sublimation stems from where I started over 25 years ago: The photo gifting business. Who doesn't love their photo on a coffee mug, T-shirt, jewelry, and keychains? It's





a "fad" that will never go away as we see many large chain stores offer these items but outsource, which adds additional cost and shipping. Why wait when you can make them instantly? We all love instant gratification.

#### SUBLIMATION FOR SIGN SHOPS

Sublimation printing is excellent for sign shops. It's fast, easy, and profitable. The marketplace is for every type of business owner, and you have clients that will need sublimation.

Sign shops can produce instant out-door/indoor multicolor sublimation signage in minutes by simply designing the image or logo and printing and pressing in minutes. This quick sign can bring high profits in no time. By adding sublimation, you can start offering your clients ad specialty, promotional, and fundraiser items. Sign businesses can produce a banner for their holiday photo gift offerings and open business to new clients who may not have signage needs.

# SUBLIMATION FOR EMBROIDERY SHOPS

Like anything else in our industry, embroidery is a great skill, but not all businesses can afford embroidered shirts. The alternative is sublimated shirts, and yes, we can do light-colored polyester performance shirts. Remember: no white printing. This is also a great alternative for tote bags, baseball caps, and other wearables and accessories where the client can't afford embroidery. You will now open your existing business to the marketplace for new gifting and promotion ideas in the market.

Sublimation printing is excellent for sign shops. It's fast, easy, and profitable.



Sublimation offers an outlet for shops to transform themselves into a one-stop shop for all products and services their existing customers need. (Image courtesy JDS Industries)



**Images courtesy Sublimation101** 



Image courtesy Beaver Paper



Image courtesy Marco Awards Group



Image courtesy LRi/ Laser Reproductions Inc.

#### SUBLIMATION FOR SCREEN-PRINTING SHOPS

Sublimation can complement a screenprinting shop by taking care of any shortrun, multicolor jobs. It's also great for moisture-wicking shirts, and the garment options have expanded to sweatshirts, sweatpants, pet clothing, and more. Thus, giving you the expansion the promotional business market needs.

To further illustrate why sublimation is a great "next choice" when deciding on another service to offer, it has some real benefits. As I have been told, it's a license to print money. You can produce thousands of items from ceramics, metals, FRP plastic, 100% polyester performance materials, MDF hardboard, and more! Remember specialty ink, specialty paper, specialty products equal specialty profit. You are opening up your business to short runs, ad specialty, promotional items, and photo gifts done instantly.



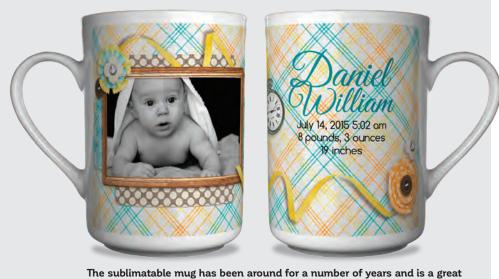
# 3 Sublimation Tips to Keep You on Track

#### By Michael Kaminsky

**Social media:** Don't ask for help here – have a reputable vendor to assist you. When you ask a question in five groups of several thousands of people, not only will you get confusing answers, but you have also wasted valuable business time. That is what a reputable vendor does — work with you and your business.

**Workstation**: Ensure that all the necessary items such as heat tape, heat gloves, scissors, and more are neatly organized, resulting in a positive production.

Target market: It's important to work in your community. Become a member of the Chamber of Commerce and get known in the business community. For further target marketing, do a simple Google search of items that are being sold for the various holidays and think of seasonal merchandise.



promotional product or customized gift. (Image courtesy Sawgrass)



# **GETTING INTO**





# SANDCARVING

What you need to know according to an industry pro

By Braden Todd



Image courtesy Ikonics Imaging



A piece sandcarved by my grandfather Wiley Smith, who owned and operated The Glass-Smith. (All images courtesy Braden Todd)



Braden Todd is a second-generation engraver and owner of Glassmith2, located in Boulder, Colorado. Braden's expertise ranges from sandcarving, industrial laser cutting/engraving, UV printing, and the other supporting facets that allow Glassmith2 to

consistently provide cutting-edge items to its retail and wholesale customers. Questions and wholesale inquiries are always welcome at braden@glassmith2.com.

let's go over the basic steps and techniques it takes to sandcarve a work of art. To begin, you need some tools and space to work in. I have always tried to keep my dust contained, but that's easier said than done. First and foremost, I highly recommend a designated blast room. To get started, you also need some essentials.

**Sandblast Cabinet** – This is where you will blast the glass and other items. You can go cheap or expensive, but the basic and important thing to watch for is how much room you'll have for this process. As the quality goes up, so do features like built-in dust collection and the ability to pass larger panes of glass through the cabinet.

For the first nine years, I used a cabinet from Harbor Freight, and it served me quite well, but then I found a cabinet from Rayzist and IKONICS Imaging and got really spoiled. The feature I enjoyed most from both blast cabinets is that the pressure pot is connected to the cabinet and allows for automatic media recycling. Automatic media recycling saves a lot of time and allows for a lot less dust creation.

**Pressure Pot** – From my experience, using a pressure pot allows for a much better blasting experience, and if you plan on doing a lot of sandcarving, this is the best way to go. Yes, a syphon system will work, but I highly recommend a pressure pot.

When I first started, I used a pressure pot from Harbor Freight. Although cheap, it served me well and was a great way to enter the sandcarving world on a tight budget. In fact, I still have my original pot around as a backup and for doing items that do not fit in my blast cabinet.





Air Compressor – This is essentially the heart of the operation, so get the best one possible. One brand I have come to trust is Quincy. They are durable and have high CFM ratings that help with long blasting needs. To get started, I used a 60-gallon upright air compressor from Home Depot. It did need to run a lot, but it lasted long enough to afford upgrading to the Quincy models.

**Blasting Media** – Aluminum oxide or silicon carbide are the most popular options. I personally have always used aluminum oxide 180 grit; it is cheaper than silicon carbide and has always served me well. I will add that silicon carbide may cost more, but it is also supposed to last longer than aluminum oxide.

**Printer** – I originally started out using a laser printer and vellum for my designs. This process did work well, but when doing small, detailed designs, I had some trouble when washing out my patterns. To get better results, I switched to an Epson 1430 inkjet printer using clear inkjet transparencies. Using the inkjet printer and transparencies has allowed for more detailed designs and less waste from our resist not washing out properly. If possible, I highly recommend going the inkjet route.

**Resist/Vinyl** – This is what you'll use to make your designs. If you want a lot of detail or small text, washout resist can't be beat. In my experience, washout resist is best for pint glasses, awards, light carving, and even some stone blasting. The deeper you want to carve and the hardness of the substrate determine how thick of resist you should use. Generally, lighter use or objects that are curved do better with a 3-mil resist, and the heavier blasting is better with

"Glassmith2 has always focused on designing and producing one-of-a-kind awards using unique materials and processes. We have since expanded from sandcarving and paint-filling to laser cutting and UV printing. The thinking-outside-the-box mentality has remained a constant throughout the growth of the business."





The first sandcarved piece I did was of an eagle's head.



Some early work I did included a set of wine glasses.

a 5-mil resist. The thicker the resist, the better it holds up to the sand and heat produced from sandblasting.

When first getting started, it is a good idea to buy a starter kit so you can test various resist thicknesses and ensure you get all the needed exposure items. If you want to do heavy carving into glass, sand-carving vinyl is made for this. You can get thick, high-tack vinyl that allows you to carve the most aggressive designs out there. Generally, my go-to vinyl supplier is Hartco 300 series; this has worked well for glass and some stone blasting.

**Squeegee** – This tool helps you place your resist or vinyl onto glass with minimal air bubbles. To use effectively, place your design onto the glass and press the resist/vinyl down from the top to the bottom in one straight line. Next, use the squeegee to work from the middle of your design to the closest edge. This forces the air out of the design and to the closest edge. By working from the middle to the edge, you avoid trapping the air while trying to remove it.

**Bubble Popper (aka Wire Wheel Brush)** – This little gem is a lifesaver. When I first started out, I did not know about the wire wheel brush and constantly had issues with centers of letters blowing off when blasting. Turns out that there was a trapped air bubble that lifted the resist off the glass and allowed the centers of letters to not adhere to the glass.

The wire wheel brush pops the membrane of the resist, removing the trapped air, and allows you to press the resist onto the glass and avoid costly ruined pieces.

Two-Inch-Wide Masking Tape – This is the one supply that drives me crazy, and I can't seem to live without it. I like to use the two-inch-wide tape because it quickly covers the glass I do not want blasted. The tan-colored masking tape from Home Depot works well and isn't too expensive. The reason the tape drives me crazy is because you only use it for a short time and then it goes straight to the garbage.



I try to keep my dust contained, but that's easier said than done. I highly recommend you have a separate blast room.

#### **4 STEPS TO SANDCARVING**

Throughout the 12 years that I have been in business, I have taught many employees how to sandcarve. As I tell everyone I teach, your prep work greatly affects your final quality. Work on a clean surface when dealing with your resist. If you have dust on your design and expose it in the Letralite, you will get pin holes in your resist that will ruin your item when blasting.

**Step 1:** Before placing your design, clean the glass with denatured alcohol to remove any grease or debris. Take your time placing your design — remove as many air bubbles as possible with your squeegee. Once your design is placed, use your wire wheel brush to pop the membrane on the resist. After popping the membrane, make sure to press the resist onto the glass and force out any remaining trapped air.

**Step 2:** Now that the design has been placed, it is time to mask off the glass. Start by surrounding your design with masking tape; press it down onto the resist to create a seal. Then work your way out from the resist and cover the exposed glass with overlapping layers of tape. I like to hold the piece to the light to see if there are any missed areas that still have exposed glass showing.

**Step 3:** Once the item has been masked off, it is time to go to the blast cabinet. Before placing the piece in your blast cabinet, make sure that no resist has lifted off and press it down one last time. When starting to blast, your sand and air flow need to regulate to a steady stream.

If you have dust on your design and expose it in the Letralite, you will get pin holes in your resist that will ruin your item when blasting.







Step two of the sandcarving process. Once your design has been placed, it is time to mask off the glass.



When blasting, it is crucial for your nozzle to remain 90 degrees to the surface of your piece.

### **COMMON ISSUES AND CAUSES**

**Design won't washout** – Poor artwork, transparency, or resist has been exposed to UV (watch out for sunlight.)

**Centers of letters come off while blasting** – Air bubbles in the mask cause resist to not adhere well

 $\begin{tabular}{ll} \textbf{Resist lifts off glass around design} - \textbf{Blasting at an angle allows} \\ \textbf{your sand and air to lift the resist} \\ \end{tabular}$ 

**White dots around engraving** – Too high of air pressure or too coarse of blasting media; the sand makes tiny pierces in the resist resulting in a salt-and-pepper look around the engraved image

**Ruts and uneven engraving surface** – Blasting too close or going over the same spot too much; move your nozzle back and overlap your areas more evenly

Aim your nozzle away from your piece. Once the stream has stabilized, you are ready to begin blasting.

I like to start further back and move my nozzle into my piece; generally, I end up roughly 4" away from my piece when blasting. Your design, air pressure, and nozzle determine the exact distance needed. Too close and you can dig ruts into your design; too far and you will not efficiently blast the glass and have higher risks for a blow off.

When blasting, it is crucial for your nozzle to remain 90 degrees to the surface of your piece. If you blast at an angle, your blast will show it, and you will have issues with your resist lifting off and your piece being ruined. The other critical step is to make sure you have small overlapping circles. This ensures you have a smooth, level sandblasted surface. Note that if you are carving into glass, you use a different approach to show the depth and shapes.

When you first start to blast the glass, you will see the resist membrane blow off and the glass will turn a frosted white. The more you blast, the deeper the engraving becomes; I judge my depth based on the amount of shadow that is created at the edge of the engraving.

**Step 4:** Once your image is fully blasted, you are ready for cleanup. I like to rinse off any extra sand with water, then using warm water, allow the resist and tape to become pliable until they simply slide off. Use caution to not scrub the glass. If there is sand on the resist or tape, it can scratch your glass. Rinse before, during, and after while cleaning the tape and resist off the glass.

I like to use a lint-free microfiber cloth and denatured alcohol for the final cleaning process. This removes any leftover resist and tape residue, as well as fingerprints, making the glass ready for your customer.

## EXPANDING INTO THE AWARDS MARKET

The knowledge and skills I learned from sandcarving decorative glass art have allowed me to make the transition into

the awards market. Some of the most unique and creative awards that Glassmith 2 has produced have utilized sandcarving. One of the first bulk award orders that Glassmith 2 received was for the Wild on Windsor Triathlon.

For these awards, I wanted to produce something completely unique and memorable using the equipment that I had at the time, which was primarily my sandcarving setup and a stone saw. For the Wild on Windsor awards, everything was done by hand, from the cutting of the flagstone bases, to sandblasting the ripple details.

These sandcarved awards opened the door into the awards market. Glassmith 2 has always focused on designing and producing one-of-a-kind awards using unique materials and processes. We have since expanded from sandcarving and paint-filling to laser cutting and UV printing. The thinking-outside-the-box mentality has remained a constant throughout the growth of the business.

It is amazing to look back and see how far Glassmith2 has come. From the beginning when it was just me and a sandcarving setup to today where we have the latest equipment and a team of dedicated and talented team members, it has been an amazing journey.



#### Blasting cabinets:

http://bit.ly/harborfreightcab http://bit.ly/rayzistcabbit.ly/rayzistcab http://bit.ly/ikonicscab

#### Harbor Freight pressure pot:

http://bit.ly/harborpressure

# Other sandcarving tools and equipment

http://bit.ly/rayzistpackage http://bit.ly/ikonicspackage http://bit.ly/hartcovinyl http://bit.ly/rayzistsqueegee http://bit.ly/ikonicssqueegee http://bit.ly/rayzistwirewheel http://bit.ly/ikonicswirewheel



# BEGINNING YOUR JOURNEY IN

# **UV-LED Printing**

Avoid unwise decisions and costly mistakes when acquiring UV printing equipment

By Bill Lydick



Bil Lydick is the president of PDS Equipment. He has 57 years of experience within the printing equipment industry. n this article, we'll cover what you need to know about acquiring UV printing equipment and the questions you need to ask beforehand.

The scary thing is you "don't know what you don't know!" This could lead to making unwise decisions and costly mistakes. The UV print process is relatively new. It's really only settled into the marketplace in the last seven to 10 years — that's not a long time. Many problems have been solved, and systems have improved, but technology is advancing and changing at a rapid pace. This means some brands and models have been discontinued or disappeared





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altogether, leaving owners out in the cold. So, let's cover some major buying points you want to know before making the big purchase.

#### **INK ADHESION**

Because UV prints directly to the substrate — and can thus print to almost anything — you cannot assume the ink will stick and be durable. Test the substrate before moving forward with a standard crosshatch adhesion test. Use the brand of printer that you are considering for this test. Some brands have more than one type of ink. For example, Mimaki has eight different types of ink suited for different products. Some are flexible and can bend, while some are ridged for better adhesion. Ask the company you are working with to help you with testing. If they don't have running equipment or are unwilling, this may be a red flag.

#### **CONSUMABLE COSTS FOR UV PRINTING**

Print heads: Some brands have consumable print heads, while others have life cycle print heads. When cared for well, they can last up to 10 years. You'll usually find this in the top brands. Those models may sound pricey, but when you consider

"Be careful with dealerships that sell many different brands and types of equipment — they cannot be experts at everything."



In UV-LED printing, a thin layer of ink is spread over the printable surface and instantly cured or hardened using ultra-violet or LED lamps. which makes the overall process versatile and quick. (Image courtesy Roland DGA)





The UV printing market is one of the fastest-growing segments in the print industry. (Image courtesy Roland DGA)

buying heads every eight to 12 months for machines that can have as many as eight heads, your investment on consumables can quickly add up.

Ink: One of the biggest holes you can step in is not fully understanding ink cost. This cost can be well hidden. Smaller ink cartridges sound less costly but not when you compare. Models that have bulk ink systems are almost always cheaper to operate and, in some cases, thousands of dollars less when comparing equal volumes.

Ink costs are widely available on the internet. Most use the unit "cc," but "ml" is the same volume. Take the total cost of the package and divide the number of cc or ml to get the per cc or ml cost. Now, find out how much total volume ink comes with that brand and multiply cc or ml cost. Do the same for the brand you are comparing it with, and it will reveal the true cost of ink. We did a five-year ownership term study on a well-known brand, and it saved us over \$50,000.

#### **NEVER BUY A KNOCKOFF**

You hear quite a few horror stories when you have been doing this for a long time and have worked many trade shows. I have a customer that bought a knockoff that disappeared from the market after a few years and left him and his business dead in the water — and he still owed \$18,000 on his machine.

#### **TECHNICAL SUPPORT**

Know before you go! Every company you ask will say they have service. This is maybe the biggest issue that leaves buyers disappointed and upset. Even big names can fall short, so don't assume that the big name means great support.

Be careful with dealerships that sell many different brands and types of equipment — they cannot be experts at everything. Seek out the specialist companies that focus on one brand and do it great. This information can be obtained through user forums, special UV Facebook groups, and social media platforms.

# One of the most profitable products to print are name badges.

#### **LOOKING AHEAD**

Let me leave you with a positive note. Much of what I have shared may scare you out of the UV printing market. Please replace fear with knowledge. The UV printing market is one of the fastest-growing segments in the print industry. The opportunities are unlimited, and the direction you can take your company and the products you can create will reward you with great profits from uncrowded markets. Feel free to reach out to me for help with any questions or concerns you may have. Happy printing!

# Popular Products to UV Print By Steve Weist, PDS Equipment

#### Here are a couple of products our customers have produced with small-format UV printers.

**Name badges:** Probably the most profitable product to go after. All name badges are personalized and bring a super high margin when printed on a rainbow foil, metalized badge, or leather badge. One name badge can sell for \$8-\$15 per badge.

On a small-format UV printer, you can print many name badges at once. For example, with a 1"  $\times$  3" name badge on a 24"  $\times$  16" print bed, you can produce about 100 name badges in less than five minutes. Your cost to produce these badges is less than \$100 for the blanks and the magnets that go on the back of the badges. The retail value of this five-minute bed at \$12 per name badge is about \$1,200. This might not sound believable to you, but we see this often.

Christmas ornaments: Another amazing opportunity is Christmas ornaments. Christmas never sneaks up on us — it happens every year at the same time. Personalized Christmas ornaments retail anywhere from \$10-\$25 per ornament. On a 24" × 16" print bed, we can produce 35 3" × 3" ornaments with a retail value of an average of \$20 per ornament — for a five-minute total of \$700 retail value.



Images courtesy American Teething and Craft Supply

# LASERING AND SELLING





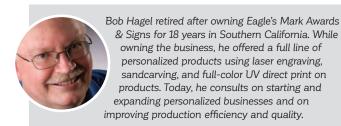




# Acrylic Products

By Bob Hagel

#### Jumpstart your engraving business with plastic





This name tag demonstrates how shapes of all kinds and sizes can be easily cut from acrylic sheets. (All images courtesy Bob Hagel) Acrylics are a type of plastic. Acrylic is typically very hard and durable. For our industry, acrylic is either manufactured with an extrusion process or is cast by pouring liquid into a cast in the shape of the product. Cast acrylic is very scratch resistant, yet metal tools will scratch it and scratches are difficult to remove. Extruded acrylic can be made thick and cut into shape. Cast acrylic can be cast into sheets. So, don't look at a product and assume how it was made.

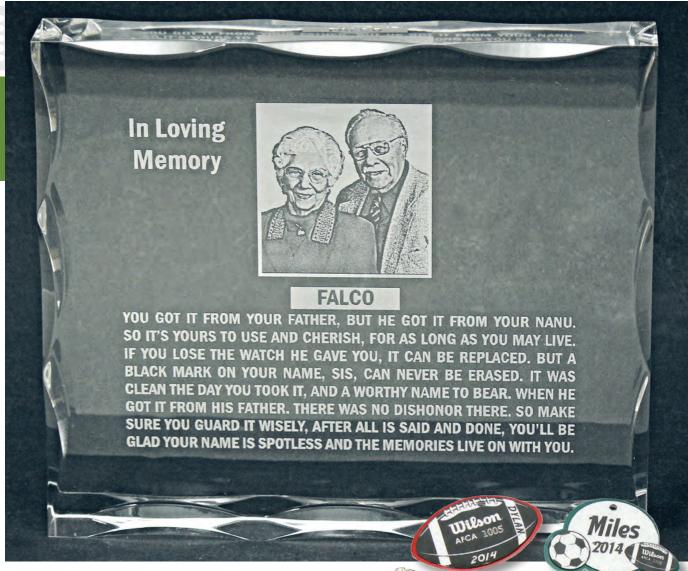
#### **EXTRUDED VS. CAST ACRYLIC**

Why does it matter whether acrylic is extruded or cast? Cast acrylic laser engraves white, does not easily melt, and lasers with precise edges allowing for high resolution. It is easy to clean and holds great detail. Clear cast acrylic is very opaque and has great visual qualities. Extruded acrylic can be cut with a laser to make letters or other shapes. Yet, if it is laser engraved, it cannot be easily read, will melt, and is not presentable. It is less expensive to manufacture.

Both types of acrylics have their uses. Buying acrylic plastic products from our industry is the safest way to make sure you have the right product for the use you have in mind. Products will typically say they are "laserable" (engravable) or can be "laser cut."



I designed a whole firefighter response ID system for a local fire department. The entire system included numerous acrylic products.



Clear acrylics are great for photos as well as text. Lower resolutions in the range of 200-400 DPI work best. Make sure your photo resolutions match your laser settings.

Make sure the products are for lasering and not for print or another process. You may find acrylic plaques that are lasered from the reverse side removing a paint layer to reveal the text and graphics. Make sure you read directions and reverse your text and graphics when needed. Ruining expensive acrylic products because you rush through a job and don't read the instructions will leave you feeling foolish and perhaps with an order that is not profitable.

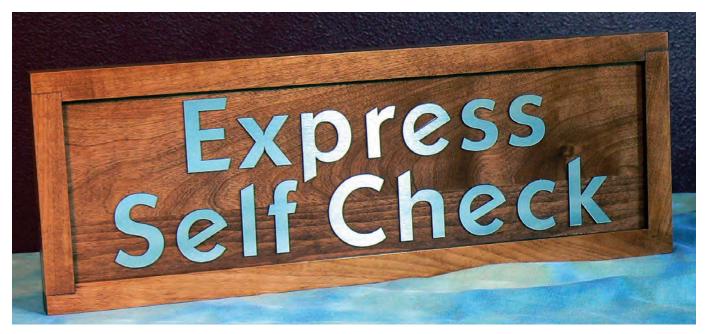
Why acrylic plastic? Acrylic plastic does not give off harmful gases like some other plastics do. Polyvinyl chloride (PVC) is one of them. Lasering certain plastics can be harmful to your laser operator and other employees, as well as damage your laser and invalidate its warranty. PVC gives off chlorine which is very harmful to the body and your laser's optics. If you laser your customer's products, do not laser any plastic products that you cannot identify the type of plastic it is made from. Products that appear to be leather can also be plastic and melt when lasered. I had a high school football coach bring me several footballs that he said he guaranteed were leather. They were not! Many book covers,

Laser engraved and cut ornaments are just one custom product you can sell.

such as bibles, have what appears to be leather covers that are made from plastic. I only made those mistakes once.

#### **SHOW OFF YOUR WORK**

You may have customers that are familiar with wood plaques as awards, yet they can't imagine acrylic awards. Displaying samples in your showroom or in a virtual showroom (your website) is important. Describing acrylic awards is not easy without a photo. I highly suggest you display products you engrave or print. Customers want to see your work and displaying logos



Acrylic letters were cut out and applied to stained wood to make a unique custom sign for a library.

# Why acrylic plastic?

Acrylic plastic does not give off harmful gases like some other plastics do. Polyvinyl chloride (PVC) is one of them. Lasering certain plastics can be harmful to your laser operator and other employees, as well as damage your laser and invalidate its warranty.



The solid black acrylic lasers a bright white with very high contrast.

that are familiar to them is a great way of relaying who your loyal customers are. Your samples show off your layout and graphic skills as well. Samples can be an important part of your marketing plan. There are acrylic products for almost every use, from keychains and bag tags to awards, plaques, and decorative pieces and many color combinations of 2-ply sheet goods.

#### **WORKING WITH SHEET ACRYLIC**

Sheet acrylic can be lasered and laser cut into your own custom products. Shapes cut from sheets is a great way to add color to a wood-based custom decorative product. There is also a very limited number of color combinations of 3-ply sheets available. It is laserable on both sides and can be used for signage that needs to be read from both the front and back sides. Mixing acrylic laser cut from sheets with wood and even metal pieces can make for some very interesting and creative decorative products. I sold thousands of name badges each year, mostly made from lasered sheet goods, in a variety of color combinations. They can be highly profitable and repeat orders from organizations and independent business owners. The biggest challenge is getting a good quality graphic file of the logo. However, graphic files are a topic for another article. Name badges are one of the least expensive methods of marketing and business recognition. In today's world, they are an important way to put potential customers at ease as you approach them. Acquiring trust in a world where scammers are everywhere is a number one priority.

#### **POWER & SETTINGS**

When it comes to power and speed settings, they will differ between clear acrylic, sheet goods, and if you're removing a painted color coating from solid-color acrylic. As clear cast acrylic turns white when lasered, you do not have to engrave deeply to have the lasering be readable and look good. Some engravers prefer some added depth to provide more dimension to the engraving. I am one of those engravers. Adding depth can enhance the detail, especially for graphics. You could get a deeper result by

adding a little power or as I preferred, by slowing the laser speed.

Engraving with a second pass is also possible but can be risky. A slight movement of the product can ruin the product. It is more time-consuming to add a pass than to slow down the laser a little. Some engravers like a softer look to their engraving on clear acrylic. Softer edges can be accomplished by taking the laser slightly out of focus. Increasing the distance between the laser and product by dropping the laser bed will give you this look. You only need a few quick pushes of the button to drop the laser enough for softness. A millimeter or less will work. Experiment with a practice piece or ruined product. I recommend keeping a few bad pieces around to run any questionable graphics or laser setting changes you have in mind.

For sheet goods, you just want to remove all of the top layer of acrylic and just get enough depth into the bottom layer to be sure all of the top layer is removed. This will be the same for any reverse side paint layer. Extra depth provides no real added benefit. However, you do want to make sure there are no slight streaks or a thin layer of the paint coat or top layer showing. A second pass may be necessary. Make sure you change your settings if you begin to encounter this happening. Remember, this could happen at any time as your laser tube ages.

If you are new to laser engraving, begin with the settings your laser manufacturer recommends for the wattage of your laser. If you bought the laser used, you may find you need to add power to your settings or slow the laser from the recommended setting. As laser tubes age you will find your settings need to change too. If the settings needed greatly differ (much more power and much slower) than the recommended settings or the quality of the results are suffering, you may be near the end of the tube's life. Don't wait for the tube to quit. Replace the tube or at least have the wattage checked to see what's remaining.

#### **MAINTENANCE**

Cleaning your laser and products are both important topics. All plastics are



This acrylic was reverse engraved with a black paint coating on the back. Text and graphics were reversed as well.

oil-based products. They will leave a residue on both your laser engraver and on your products. Clear acrylics leave the least. Colored sheet goods will likely leave the most.

Vacuuming your laser each week or maybe even more often depending upon your laser's use will be needed. Not keeping your laser clean will wear out parts more quickly. Remember your exhaust ports and tubes will also build up a layer of this sticky plastic. Certainly, lasering wood will greatly add to this. You will need to clean your lens and mirrors even more often with a lens cleaner you can purchase from one of your industry suppliers or the laser manufacturer. Plastic cleaners may also be useful.

Lasered products may also require cleaning. Depending on the buildup, I found I needed different products. For general plastic smudge from the gases, I found Novus 1 to work just fine. I found when a more aggressive cleaner for both products and the laser was needed, LA Awesome worked quite well and is very inexpensive. Never use any cleaner with abrasives, alcohol, or any product used with paints such as a paint thinner. You may scratch the acrylic or craze it (small cracks). Always check to make sure a cleaner is safe for plastic. Adding acrylics to your product list is a great way to increase your profits.



The large jail cell key was laser cut from a 24" x 12" sheet and laser engraved.



# Settings for Laser Cutting Acrylic

Braden Todd, owner of Glassmith2/ GS2 Awards, shares recommended settings for his Epilog Laser machines. https://gpro.link/settings

# MAKING ROOM FOR











# ROUTING

Considerations before adding CNC to your shop

By Paula Aven Gladych

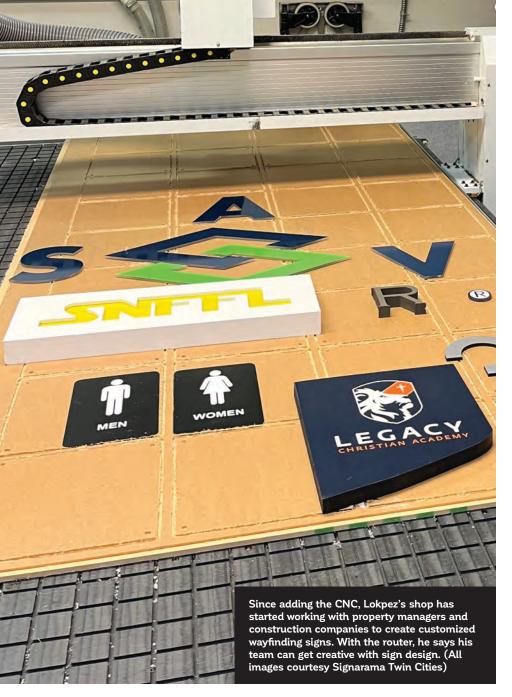
Paula Aven Gladych is a writer based in Denver, Colorado, who has been covering the graphics industry since 2014. She can be reached at pgladych@gmail.com.



Before buying the Signarama franchise in Roseville, Minnesota, in 2019, Ederick Lokpez was a marketing executive and director of strategy for a U.S. bank. He got laid off in 2018 and was offered a job with Accenture, which would have required him to travel four days a week and be away from his family. Sitting in the bleachers of his son's hockey game, he decided he couldn't do that anymore and decided to start his own business.

He began researching what would be better, buying a business that was already up and running or starting one from scratch. He decided it would be easier to run a business that already had a history and clientele. He chose Signarama Twin Cities, a small Signarama franchise in the greater Minneapolis-St. Paul area with only three employees that specialized in vinyl work and fleet graphics. When COVID hit, the shop wasn't prepared to make PPE or items to separate cubicles like many other sign shops were doing. Most of the work that didn't pertain to vinyl was outsourced, so the company was not being competitive, he says.

Lokpez tapped into Signarama's network of franchisees to see what they suggested for how to grow the business and most recommended buying a CNC router. At the time COVID hit, 45% of his business stemmed from vehicle graphics. During COVID, that work dried up. He





decided to buy a CNC router and put it in the 2,400-square-foot bay that was used to do vehicle wrap installations.

"It has transformed my shop," he says. Now, only 15% of the shop's revenue comes from vehicle wraps, while "routed products are 40% of our net revenue, and it has opened a whole different perspective, different outcome for how we run the business."

The shop now has six employees, and, even with COVID, his business grew 38% in 2021, which was the "best year the shop has ever had since 1994," Lokpez notes. "A lot of that has to do with all of the router products, all of the things we were outsourcing."

Cody Smith, CAMaster, says, "Most customers know they are giving away margin by outsourcing." Sign shops that do a lot of aluminum 3D letters, but have it outsourced because they only do digital finishing, simple cutting, and vinyl, are "giving away so much profit margin. If you brought that task in the building, that task will help pay for the machine on top of the other tasks you are able to do."

But buying a router isn't just something you can do overnight. It takes planning and foresight. The first step is to figure out what types of projects and signage your shop wants to use a router for and then determine the best machine for the job.

Lokpez bought a Laguna Tools router because of the price. Because his shop had lost a lot of business related to vehicle wraps during the pandemic, he couldn't afford to spend \$70,000 on a top-of-the-line CNC. After consulting with other franchisees, he determined that Laguna Tools had a good reputation. He was able to get an SBA loan to buy the CNC.





Adding a CNC, dust collector, vacuum, and air compressor means they all need somewhere to go. If a machine says it has a  $4' \times 4'$  cutting area, you are not planning for a  $4' \times 4'$  machine. It will be more like  $6' \times 7'$ . You also need space to work around it and load material.

"Buying a router isn't just something you can do overnight. It takes planning and foresight. The first step is to figure out what types of projects and signage your shop wants to use a router for and then determine the best machine for the job."

#### **POWER NEEDS & COST TO SET UP**

The next step was to make changes to the shop to accommodate the new machine. Because Signarama is in a commercial area, it wasn't hooked up to 220 electrical, so Lokpez had to change the electrical to accommodate it.

"In addition, because I was in a small commercial space, the electrical fuse box was already maxed out," he says. "The dollar number was starting to add up. The landlord says, 'That is not my problem. If you want it, I'm not paying for a commercial setup."

It cost \$3,000 to update the electrical circuit and \$2,800 to add 220-volt power to the bay area of his shop.

The only CNC routers that don't take 220 single-phase electricity are smaller beginner desktop machines or hobby machines, Smith says. He points out that even if these smaller machines can run on 110 volts, they are "not something you want to rely on for a business."

Some of the smaller routers require 20 amps of power, which is what everyone has in their house, but some larger machines require 60 amps and require the help of an electrician.

Smith recommends that shops that are outsourcing a high volume of CNC work should consider a three-phase industrial machine that can go up to 70 amps. Smaller shops that are doing more custom work can get by with a single-phase machine. Many commercial sign and graphics shops are in light commercial areas, so they don't have access to those higher levels of power.

"Most shops will have at least 100 amp or 200-amp service. The bigger single-phase machines will take 60 amps of that," he says.

Another thing to consider when it comes to power is the addition of an air compressor, which will require 10 to 20 amps, and a vacuum hold down, which holds medium to the table while it is being processed. That will take about 30 to 60 amps, "depending on how crazy you want to get with the vacuum," Smith says.

Another vacuum is necessary to extract chips and the material that was just cut, so it doesn't leave a mess in the shop. Dust collection systems require between 10 and 20 amps of power, which adds up quickly.

Lokpez bought a  $5' \times 10'$  table that came with two vacuums. He says he didn't account for that and had to build shelves in the space to elevate them for more efficient airflow. He also didn't account for the size of the machine and needed a forklift to get it into the building.

"I didn't know I needed a license to use a forklift," Lokpez says. Luckily one of his employees' husbands had a forklift license, and he ended up hiring him for a day to bring the table in and put it where it needed to go.

Lokpez paid Laguna Tools to train his staff on how to run the router once it was installed. He recommends buying lots of scrap materials so employees can learn how to route effectively at different thicknesses. He says each type of material needs a different speed and spin to get the right cuts and curves.

"I accounted for that in my PML (probable maximum loss) for the first year. I accounted for 20% excess spoilage." In the end, his shop only used 15%, but "it was a smart thing to do. It is very



easy to damage substrates if you are not taking care of the CNC or paying attention to the CNC," Lokpez argues.

The downside of putting the CNC in Signarama's back bay is that the shop lost its bay for vehicle wraps. However, Lokpez says it's been a wonderful change. "It saved our business. Without the router in COVID, we would have had to close. We were not equipped to handle COVID. We still do vinyl, but we don't actively pursue vinyl."

Since adding the CNC, Lokpez's shop has started working with property managers and construction companies to create customized wayfinding signs. "We creatively design signs in unique formats to fit their needs. The router brings an extra layer of creativity we can do to sell to customers," he says.

His shop is out of space in its current configuration, but in the fall, Lokpez says he plans to knock down a wall and reduce the size of his showroom so he can add a laser engraver and a small ADA router, so the "big router and ADA don't compete against each other for business."

The shop is also taking in routing work from another Signarama franchise and a nearby FastSigns business for wholesale work. "It is not the most profitable work, but it keeps the router running when regular projects are not coming in," he says.

Signarama also spent about \$2,500 on spindles and tools and \$6,000 on an arm attachment to place the braille beads into ADA signage. However, Lokpez stopped using it because it always missed beads. Now, his employees place the beads by hand.

#### **SPACE**

Adding a CNC, dust collector, vacuum, and air compressor to a shop means they all need somewhere to go. If a machine says it has a  $4' \times 4'$  cutting area, you are not planning for a  $4' \times 4'$  machine. It will be more like  $6' \times 7'$  in your shop, and then you also need space to work around it and load material, Smith says.

"When you get the actual measurements for the machine you are considering, plan for at least a two-foot perimeter around the machine. We do totally understand that it is not always possible. Sometimes you have to put one side of the machine against a wall, but, ideally, a two-foot perimeter is minimum," Smith says.

Space is also needed for the machine's controller or interface and someplace to keep router bits.

Most commercial shops will buy 4' × 8' or 5' × 10' routers. The difference between those two machines isn't so much about the size but the "speed with which it can do jobs that makes a difference," he adds.

Another thing shops may overlook is that they must get the CNC into their building, which means they need a large enough door to bring it in. Most shops will have a rollup door, but shops with typical 6' double doors may struggle to bring in bigger equipment.

Routers are heavy as well, so the shop owner will need to contract with a rigging company to help them or rent a forklift to bring the machine into the shop, which is an additional cost.

Purchasing the right software to run a CNC router is an important step. Most shops already use Adobe, CorelDRAW, or Flexi. All of those will interface with CAMaster's CNC router, lightening the learning curve for new shops, Smith says.

"CNCs are all capable of the same things. Every CNC router can cut the same materials and do the same things. The quality with which they do it and the speed is what separates different machines in the industry," he says. "I tell everybody, look for a product made in America so you can call a person on the phone to source components."

After that, he says, shops should look at what is realistic. Many shops have an idea of what they want to spend, but sometimes what they want to spend and their reality aren't the same thing. Just don't waste money on a machine that is too small or can't handle the work you've already got.

#### **HIGH DEMAND & SUPPLY CHAIN PROBLEMS**

As a manufacturer of CNC routers, CAMaster has been surprised by the increase in demand for its products since COVID hit.

"Demand has been crazy, and it has been for 2.5 years. Before COVID started, we were pretty busy with lead times of seven to 10 weeks," Smith says. Recently, lead times have gotten longer, between 16 and 20 weeks. It has been "hard to keep up and source the components we need. It is an industry-wide challenge. Those chips go in a lot of things."

He added that CAMaster's sourcing team spends most of its time sourcing alternative vendors to complete its products.

CAMaster builds everything in Cartersville, Georgia, except for variable frequency drives — the things that regulate power in your machine, and there has been a shortage of those, making it a challenge.

"Now we have to find alternates, but then we have to make sure the alternates work to the same ability as the originals did, more testing and more time. It is a whole different animal," Smith says.



Looking for specialty items you can make with your CNC router?

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PHONE: 800-394-4426

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#### **COMPANY PROFILE:**

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## **Johnson Plastics Plus**



12450 Oliver Ave. South, Suite 100 Burnsville, MN 55337

PHONE: 800-869-7800 WEBSITE: jpplus.com

#### **COMPANY PROFILE:**

Whether you laser or rotary engrave, sublimate, toner heat transfer, or UV-LED print, Johnson Plastics Plus has the blanks, equipment, and supplies you need to make your business successful.

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25901 Jefferson Ave. Saint Clair Shores, MI 48081

PHONE: 800-478-2457 WEBSITE: stahls.com/home

#### **COMPANY PROFILE:**

STAHLS' is the industry's only complete source to solve all decorating challenges. We've built a global business around improving every aspect of the garment personalization industry – from heat transfer vinyl and full-color digital and direct-to-film transfers to technologically advanced heat presses and more.

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Laser Engraving

## Trotec Laser Inc.



44747 Helm Ct. Plymouth, MI 48170

PHONE: 866-226-8505 WEBSITE: troteclaser.com

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Trotec Laser is a leading provider of world class laser systems known for its wide range of processing capabilities and features such as high-speed processing, high-quality components, and a patented low maintenance design.

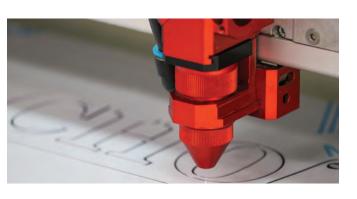
Among these systems are the Speedy Series laser engraving and cutting machines, the fastest and most productive laser engravers on the market.

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Trotec also offers large-format CO<sub>2</sub> laser cutters and high-speed CO<sub>2</sub> and fiber galvo marking laser systems, as well as an extensive line of laser and engraving materials and free laser resources. Discover how adding a Trotec laser system to your business can increase your production, broaden

your product offerings, and improve your competitive position.

Trotec was originally founded in Wels, Austria, in 1997 and established in the U.S. in Mississippi in 2002. Now headquartered in Plymouth, Michigan, the U.S. business has grown to 10 times its original size, with a growing number of support facilities located throughout the U.S., including California, Arizona, Texas, Georgia, Florida, New Jersey, Virginia, and Washington.



trotec

## GETTING CREATIVE WITH

# LOGOS

By Matt Charboneau

#### How do you approach logo design? Follow these steps!



Matt Charboneau started his career in the sign industry in 1985 as Charboneau Signs. In 2017, he published the Pre-Sale Sign Survey Field Guide. In 2019, he started Storm Mountain Signs and the Sign Design Institute. Contact him at Matt@stormmountainsigns.com; www.stormmountainsigns.com; and 970-481-4151.

et's face it, if you are reading this you most likely are not sitting in an NYC design studio creative room as part of an eight-member design team who works on \$50,000 corporate branding logo packages for multibillion dollar corporations. Then again, perhaps you are.

This article is for the design warriors out there who are disciplined to turn on their creativity at 8 a.m. and off again at 5 p.m. The folks who are leaned upon to spit out award-winning designs like they are a graphic design Pez dispenser in the hands of a 5-year-old.

This is the design market where clients don't have an extra \$50,000 in the budget for their donut shop logo, but they do have an extra \$200, \$300, \$500 or \$1,000 for a simple, easy-to-recognize design that is clever, unique and works well in the space for their sign.

The customers you are working with are typically hands-on

owners who most likely mortgaged their home to finance their dream of owning a donut shop. They are invested, they care, and they are involved in every step of the process, and you have won their trust for a logo design.

If this sounds like the customers you work with, then sit down in that chair right there and let me show you how it's done. Well, at least how I do it.









(All images courtesy Matt Charboneau)



#### A LITTLE GROUNDWORK...

Chances are, you are a designer with three to 10 years of experience. Perhaps you are formally trained in graphic design, perhaps not.

You are most likely someone who creates marketing pieces, visual products, labels, pen designs, brewery coasters, T-shirt concepts, coffee mug graphics, key chains, trophies, book covers, tire covers, truck wraps, window decals, banners, signs, labels and of course, logos at either a small to medium size design firm, sign company or other marketing agency.



#### How do you approach logo design? Which steps do you take first and why?

So here you go, you are now facing a challenging opportunity that may push your creative brain right out of your own skull.

You may have lived through this hell a few times in your past, or perhaps this is the first logo project where the perfect graphic solution isn't just popping into your head. I'm talking about the brain squeezer logo design challenges that force you to re-evaluate why you are sitting in that designer's chair and not living the good life as a manager at Taco Bell.

Fun, simple, quick logos are easy, and we all have those gifts of enlightenment where a literal logo vision pops into our head, you create it, show it, and the client loves it. You are then "the logo design hero" for at least a week or so until the next impossible design project is plopped onto your desk, and you must prove your worthiness as a creative designer all over again.

#### AN OUTLINE OF THE PROCESS

I have used these steps since the dawn of my career nearly 40 years ago. It works very well for me, and perhaps some of the ideas may help you navigate the forks in the road and avoid the speed bumps that can upset the apple cart of your creative process.

#### 1) Get your client to talk to you

Building trust with your client is key to any successful logo design project. I'm not talking about the initial meeting where the overall project was discussed. Set up a time to talk to your client in a "logo interview" where you either provide questions or interview them to find out what they want, what they expect, and what their history or experience is on purchasing logos in the past, for other companies they may have had or worked at.

Here are a few questions to work into your conversation with your client (listed at right).

Do not interrogate them. This is not an FBI interview; it's a relationship-building meeting to hopefully allow your client to be comfortable enough to open up to you and explain what they really want the new logo to look like.

#### 2) Discover your clients likes and dislikes up front

The spin on this option has only been around since Google and Bing images came into existence. In the olden days, we used magazine clippings to do the same thing. I ask the client to search online for certain keywords that will bring up images related to their industry.

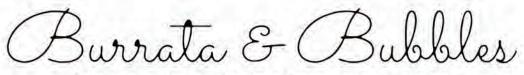
## Logo Design Interview Questions

These are questions that your client may not know all the answers to, and that's OK. The real value of the question and answer process is simply getting your client to open up and talk about their business, their hopes, dreams, goals, ambitions and their emotionally or financially driven passions for their new business.

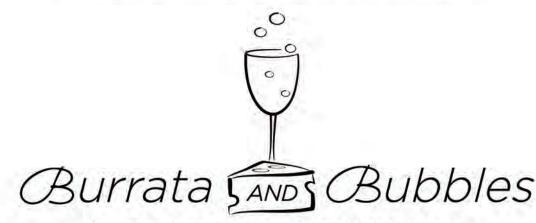
- 1) Have you ever hired someone to design a logo?
- 2) If it went well, why aren't you using that designer again?
- 3) If the process was less than optimal, what happened?
- 4) What lessons did you learn from that experience?
- 5) What is the most unique benefit of your service/product?
- 6) Why is that benefit important for your customer?
- 7) How often does your customer use your service/product?
- 8) What are the reason(s) your customer is your customer?
- 9) What forms of marketing/advertising do you feel work best?
- 10) Which advertising brings in the most sales/customers?
- 11) How much effort is placed on social media advertising?
- 12) Do you have an in-house designer for that?
- 13) Describe your ideal customer and why?
- 14) What is the economic profile of that customer?
- 15) Is the average customer "all business" or "fun and games"?
- 16) Describe their compliments and or complaints?

Logo before:

Logo after:



Company-Worthy Recipes Paired With Libations



Company-Worthy Recipes Paired With Libations

I ask them to look at the images and pick out three they like, and three they don't like and send them to me. This process is amazing at narrowing down the size of the design forest you are navigating through. It allows you to look into the client's head to discover their likes and dislikes without drawing up examples to illustrate the same thing.

#### 3) Identifying the end-viewer expectations

Who is the customer that will be viewing the logo and what design, image or graphic will they respond most favorably to? Is your product unique, rare, or not something used every day? It's critical to be clear and concise in both readability and visual clues to help all of the first-time viewers of the logo (the potential new patrons of the business).

#### 4) Outline the uses of the logo

How will your client be using the logo? If it's for their website, where else will they be using it? What will they use the logo for regarding their products and services they offer? Will they need stickers, labels, pens, hats, uniforms? How about a sign? How about social media uses?

The ways that your client will be using the logo controls how the logo needs to be designed. There is a rule of thumb in logo design that I came up with forever ago that I have yet to find an exception to, and that rule of thumb is this: Design your logo to be readable on a sign at 100 feet away, and it will remain readable at any size, no matter how small you make it. Design the logo for viewing at arm's length, such as on a smartphone, then it most likely will not be readable at a long viewing distance.

#### **CASE STUDY: BURRATA & BUBBLES**

Illustrating point No. 3 is a logo I helped fine-tune to present a "more visually informative graphic" that tells the eye precisely what "Burrata" is in one quick look.

Amanda McGrory-Dixon, the owner of Burrata and Bubbles (www.burrataandbubbles.com), had an original logo that was very lively looking — bubbly would be the most appropriate phrase and one of its features was actually hindering its function, and that was the readability of the font.

From a glancing distance, not only was Burrata a fairly uncommon term in most circles, the loops and hoops of the letter style, combined with the unstable italicizing that some fonts have, and it was a less-readable-than-desired approach that simply needed some clarification for the viewer. I didn't want to completely abandon the branding efforts she has successfully attained, so I left the original B font in place and combined it with a cleaner font. The icing on the cake was the graphic that may not directly describe what Burrata is, but the graphic indicates that it must be cheese, since the "bubbles" aspect is represented by the champagne glass. I played with the cheese and glass a few times before Amanda chose the logo assembly shown here. It was tough because burrata cheese is the shape of a lump of something in cheesecloth. It has very little iconic impact and there was nothing available that even came close to representing it so that anyone seeing it might say: "Oh hey, hot burrata, let's eat!"

"As a foodie, I'm obsessed with burrata and mistakenly thought everyone knew it was a cheese, but over the years, I found that's not quite the case, Amanda says. "To me, this (revised logo) gives the reader an instant idea of what kind of recipes they can expect."

She goes on to say, "I've seen some logos, especially in the food industry, that try to cram in too many elements, and your eyes don't know where to focus. It's also important to keep in mind how it will appear online, particularly on mobile devices."

Pictured is her original logo, and her new one. The graphic elements are all hand-drawn originals I created for Amanda's new logo to capture the quintessential graphic image that says it all about her food blog.



# CREATIVE INNER-SPIRATION SOURCE

What is your creative inner source? Have you identified it yet? Take time to stop, think, listen, and follow your own inner creative inspirational resources (it's the mojo that separates you from the accountants).

This is the voice in your head that provides you the drive, focus, passion, and desire that helps propel your creative brain into the direction the design needs to go.

The simple fact you are reading this means you are aware of this creative source, but you may not have recognized nor realized you can tap into it, like a tool whenever you need it, and you can absolutely lean on it at any time for the inspiration needed to get through a tough design project.

Every creative designer or artist who sets out on a creative process with a result in mind depends on tapping into their own private, inspirational source for the "WOW-NESS" factor. This is needed to provide the creative drive, passion and abilities that help them avoid pursuing the accounting degree they never ever wanted.

I hope this outline has helped you define the logo design process or at least helped you realize there really is a creative drive you can tap into and use to make the creative process easier and faster, and ultimately more fun for you and your customer.



Logo variation.



The client for this design approached me with the need for a mark for his new custom hat shop in Ault, Colorado. It had to be bold, unique, recognizable, easy to reproduce on all surfaces and mediums, and it had to tie-in the name with the product into one, clean, iconic logo mark.

# **GETTING STARTED IN**

# WRAPS

By Charity Jackson

#### Considerations for a worthwhile investment



Charity Jackson is co-owner of Visual Horizons
Custom Signs based in Modesto, California. She has
been in business since 1995 and has worked in the
sign industry for nearly 30 years. You can visit her
website at www.vhsigns.com.

When we first started offering vehicle wraps, we had already been in business for about eight years, and wraps were a natural progression from the vehicle lettering we were already doing. We bought one of the first large-format digital printers in our town and were very early adopters; this meant we also dealt with a lot of the early headaches as we worked through material and ink issues.

There was a lot of trial and error, wasted material, and product failure in those early years. Training resources were pretty limited back then, so we had to do most of the figuring out on our own.

Fast forward about 19 years, and the industry has completely changed. The print quality of printers has vastly improved, while the cost of machines has significantly dropped. There are more manufacturers to choose from, each with a line of products that meet various needs while incorporating improved technology. It's a great time to get started in the wrap industry, but there are some things you need to consider before making the jump.

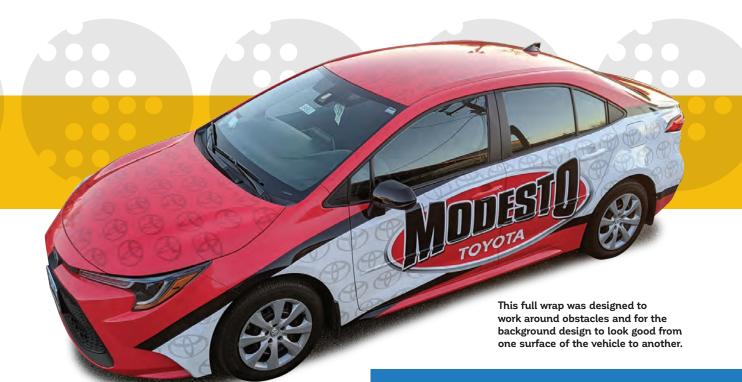
#### **DON'T DABBLE**

To offer high-quality workmanship and to maximize your profitability, you can't dabble in this industry. It's not like choosing to add in banners when you're already doing signs. Wrapping vehicles requires hands-on training, research, and monetary investments in equipment and materials.

There is a ton of information available on the market – videos, manufacturer bulletins, supplier training courses, and hands-on education and certification programs. I highly recommend taking the time to do some research. See what areas interest you



While we print in-house, we also do installation work for other companies. These vehicles received door wraps as part of a Wrapify campaign. (All images courtesy Charity Jackson)



most, check into training programs, and list what your shop would need to offer vehicle wraps, so you have a clear picture of what your costs will be.

Do you want to specialize in color-change wraps or commercial advertising wraps? Or both? Do you plan to print and install, or do you want to specialize in installation only? Will you outsource your graphics while working directly with your customer or specialize in contract installation for other print shops? Do you want to be a certified installer for one or multiple manufacturers?

To break down the path we took – our shop specializes in commercial wraps and partial color-change wraps. We print in-house for most of our wraps while also offering installation for large print houses with nationwide contracts, and I'm an accredited 3M preferred installer.

#### **IN-HOUSE OR OUTSOURCE**

If you're already doing full-color printing in-house, you have a printer, laminator, worktable, computer, RIP software, and design programs. You may need to add to your current equipment or software, but you've already made some initial investments.

If you're just getting into the industry or are branching out on your own, you have a couple of options. You can choose to print in-house, which means you'll need to invest in the equipment necessary to do so, or you can outsource the graphics while you do the installation.

If you decide to outsource your graphics, you'll need to find a reliable source for your printed graphics. Make sure you have a solid understanding of the materials you want to use, including the proper overlaminate, so that you know what to look for from your supplier.

If you do outsource, consider you'll have less control over color management, and you won't be able to do quick reprints for messed up or ill-fitting panels. Also, consider whether you'll be There is a ton of information available on the market – videos, manufacturer bulletins, supplier training courses, and hands-on education and certification programs.

designing the wraps and providing the artwork to the printer or if that will also be outsourced.

As previously mentioned, it's important to research the path you want to take in this industry because if you plan to specialize in color-change wraps, then you won't need to worry about outsourcing printed graphics. Rolls of color-change media can be purchased from a wholesaler and are ready to install. Vinyl samples are available for your customer to choose from, so you don't have to worry about color discrepancies either.

#### **TOOLS AND EQUIPMENT**

So, as you consider the path you'll take in the wraps market, here's a partial list of equipment and tools you may need to invest in. Some are necessary, and some are handy. This is not an exhaustive list, but as you choose what to add to your arsenal, make sure that the investment improves the quality of your workmanship, makes you more efficient, or does both. That's how you know whether the tool or equipment is worth the cost.

If you plan to print your graphics in-house, you'll need to invest in a large-format printer that can print at least 48" to 60" wide panels. You'll also need a cold, pressure-sensitive laminator that accommodates laminates at the same widths as your print media.

Many large-format printers also have a cutter built in, so you may not need to invest in a separate cutter initially. As your volume of work increases, you may consider a separate cutter that's

#### **Business Success**

By Sean Tomlin, Designer Wraps & Signs

Are your goals set? Are you an owner? If so, are you working on your business, not in your business? Are all your staff members on the same page as your leadership team? Is your vision clear to the entire organization?

**Pro tip:** Print out a large poster or vinyl lettering of your core values on a very visible wall in your shop (or in the breakroom). Track successes and wins and celebrate them (and your employees) publicly during your staff meetings.

compatible with your printer so that you can be contour cutting graphics without interrupting the workflow on the printer itself.

We've invested in a back-lit application table that we use in conjunction with our laminator for laminating and prepping graphics. We love our table for sign application especially, so it's not necessary for just starting in the wraps industry but may be a worthy investment down the line. Initially, though, you will need a large work surface, preferably at least  $5' \times 12'$ , with a cutting surface for trimming laminated graphics.

You will also need a fast computer, RIP software, and design software for creating and outputting your graphics. Racks for storing media rolls and drying your printed graphics will also need to be purchased.

For contour cut graphics, you'll also need to apply application tape. You can purchase or build an application tape dispenser, or if you invest in an application table, there is a built-in bar that you can mount application tape rolls on for easy masking. You'll also need a safety straight-edge and heavy-duty box cutter-style snap blade knife for cutting down panels.

Tools involved in the wrapping process can be a pretty long list, and many of them come down to personal preference. Here's what I'll call a partial list because you'll need to decide what tools meet your quality and efficiency checklist.

For wrap comfort and accessibility, you'll need a quality rolling wrap chair with a cushioned seat and attached tool storage. You'll also need work platforms, step ladders, taller ladders, and rolling scaffolding.

Your installation tool chest should include squeegees with hard and felt edges, rivet brushes, retractable knives with snap blades, blade disposal bins, small plastic tools for tight areas, plastic scrapers or specialized tools for emblem removal, scissors or a Snitty, air release tools, heat guns and extension cords, portable propane torches, masking tape, cleaning products and lint-free towels, specialty tools for concave areas and textured surfaces, wrap gloves, tape measures, and magnets for hanging graphics.

#### **PRICING**

Getting started in wraps goes beyond the actual installation and equipment as you also learn to price yourself to make a profit. When we're quoting a wrap project, the pricing gets broken down into three areas – graphics, design, and installation. Each of these areas directly affects how you price your wraps.

You're in business to turn a profit, so you must know your material and overhead costs and price your graphics to cover these costs and make you a living. We've created a spreadsheet for all our graphics and signs that breaks the pricing down by the square footage, with price breaks for larger projects.

When pricing installation, there are a couple of approaches. Some companies price out installation based on a per square





Wrapping cars doesn't always mean a full wrap. Partial wraps can meet both the customer's advertising needs and their budget.

foot rate – for example, if an install is 200 total square feet, then it's a flat price per square foot whether it's a box truck or a sedan.

We price our installation based on the vehicle itself and its unique obstacles. We can wrap a large box truck or trailer as fast or faster than a small sedan in some cases simply because we're dealing with fewer obstacles and less trimming.

After so many years of installing, we have a pretty good idea of how long it will take to wrap a particular vehicle. If we're wrapping a utility bed truck with many small boxes and handles that will require a lot of trimming, then we take that into account and add a little more time. If it's a Sprinter van, we'll consider the concave areas and small rubber trim areas that need to be trimmed out.

#### **GRAPHICS**

As I mentioned, there are three considerations when pricing out our wraps. I wanted to look at each topic and review how important they are as you venture into the wrap industry.

There are so many different manufacturers and media types on the market that it can get overwhelming as you consider your options. My best advice is to choose quality and consistency and avoid cutting corners.

A good quality wrap media will not only be easier to install, but it will look good and last longer. The quality of your wraps will build your reputation; don't risk it on inferior products to make an extra dime upfront because it will cost you in the long run.

We have a problem with graphics quickly browning on horizontal surfaces in our area, so we use 3M 8548 gloss non-PVC laminate on all our vehicle wraps. Through trial and error, research, and testing, we've found this to be a great product. We pair it with IJ180Cv3 or IJ480 wrap media for most of our jobs.

Check out different manufacturers and try out other materials to see what media you like working with; once you find media you like, I recommend sticking with it to create long-term consistency in media type and color output.

Wraps are not only long-term investments; sometimes, a customer needs a short-term advertisement where a transit media or material with a temporary adhesive is the best choice. Or you might have a project where a reflective or metallic film is required.

Be sure you know your options, understand how adhesive differences will affect your installation and removal and consider material costs to meet the customer's needs and budget.

#### **DESIGN**

If you choose to go full-service with your wraps, meaning you'll be doing all the graphic design in-house as well, then you need to educate yourself on effective wrap design. Look at examples of other designers and note things you like or don't like about them.

Commercial wraps must meet the customer's needs. The design should not only be effective and professional, but it should also reinforce the company brand. Take the time to learn your printer's color output and create custom color charts in addition to Pantone charts for the customer to choose from.

You need to also learn how to design a wrap from an installer's standpoint – obstacles and planes of the vehicle need to be considered as to how they will affect the installation. A well-thought-out wrap design will make an installation faster and more profitable.

#### INSTALLATION

Whether you decide to wrap vehicles using in-house printed graphics or by contracting with other companies, this is an area where you must do your homework. Ongoing education and hands-on training are imperative to becoming a top-notch installer.

As you first get into the industry, practice on personal vehicles, your shop truck, breakroom refrigerator, or file cabinets. Play with material types, heat variances, and different tools.

Watch industry videos and then practice the techniques you see. The best way to become a good installer is to glean insight from more experienced installers and practice, practice, practice. You'll find your techniques improve, and your installs get faster the more you do.



#### **DESIGN TERMINOLOGY 101:**

# ADOBE VS. COREL

**By Doug Zender** 

### Matching terms for similar features in both design programs

Doug Zender has used CorelDRAW extensively since version 4. His goal is to minimize the intimidation of the program and give users the sense that CorelDRAW is a friend, not an adversary. Doug began as a design artist, then moved into the sign industry in 1992 doing vinyl graphics. You can contact him at dezender1@gmail.com.

Adobe Illustrator	CoreIDRAW
Artwork	Drawing
Path	Curve
Anchor Points	Nodes
Direction Points	Control Handles
Palettes	Dockers
Place (Files)	Import (Files)
Gradient Fill	Fountain Fill
Live Color	Color Styles & Harmonies
Swatches Palette	Color Palette
Stroke	Outline
Convert Stroke to Outlines	Convert Outline to Object
Guides	Guidelines
Smart Guides	Dynamic Guides
Outline View	Wireframe View
Clipping Mask	Power Clip
Rasterize	Convert to Bitmap
Actions	Macros/Scripts
Live Trace	Corel Power Trace
Save for Web	Export for Web
Pixel Preview	View / Pixels
Compound	Combine
Uncompound	Break Apart

Fig. 1: All images courtesy Doug Zender



Recently, while visiting the sign shop of a friend, I met a young lady who had been hired as a designer. She was quite proficient with design aspects of Adobe Illustrator. This shop, however, used CorelDRAW for nearly all its designing, so she had to learn a different program. One of her greatest hurdles was with the terms used to describe similar functions between the two programs. To help her with understanding the differences, I created a *quick reference chart*. (Fig. 1) In the left column are the basic terms used by Adobe Illustrator and the right column shows the corresponding description used in CorelDRAW — these do not reflect all the differences but are the most common terms used. Both programs can produce nearly identical functions, but the terms used are quite different.

Let's go over some of the differences, beginning from top to bottom. To start, in Illustrator, an illustration or design is called *artwork*, but Corel calls it a *drawing*. The main difference is that Corel can have multiple pages while the Adobe counterpart is one drawing that simulates several pages.

#### Curve vs. Path

Though both programs can draw various kinds of lines, Adobe calls them paths and Corel calls them curves. They are the same thing.

#### **Nodes vs. Anchor Points**

Along a curve object, there are certain points that control its appearance. In Corel, they are called nodes and Adobe calls them anchor points. They are the same thing.

#### **Control Handles vs. Direction Points**

A node or anchor point sits directly on a line. Extending out of that point are invisible lines that control the shape of the curve on either side of it with a data point at the end that allows the invisible lines to be manipulated. Corel calls them control handles and Adobe calls them direction points. (Fig. 2)

#### **Dockers vs. Palettes**

Both programs include a special variation on dialog boxes to help users interact with the software. Corel calls them dockers and they are called palettes by Adobe. There are slight differences, but they are similar. **Fig. 3** shows a CorelDRAW Color Docker on the left side and a Color Palette used in Illustrator on the right.

#### Import Files vs. Place Files

Most projects require one to bring in artwork from another file. Corel uses the File > Import command while Adobe's process is File > Place. Both accomplish the same thing.

#### **Export vs. Save As**

Often you will want a document to be output in a file type that differs from the native format. In Corel, you would choose File > Export and then the format you want. Adobe uses File > Save As followed by the format desired.



#### Fountain Fill vs. Gradient Fill

Any object that has one color that fades to another is called a fountain fill by Corel and a gradient fill by Adobe. The techniques and names are different but the results are the same.

#### Color Styles and Harmonies vs. Live Color

Whenever you want to change an overall color scheme, both programs have features to facilitate it. Corel terms these color styles and color harmonies while Adobe uses the term live color.

#### Color Palette vs. Swatches Palette

Both programs have an element to easily change the color of objects in a drawing. Corel calls them color palettes and Adobe calls them swatches palettes.

#### Outline vs. Stroke

Whenever you have a shape or object, you can fill it with a color and have a color follow its edge. Corel refers to that color as an outline and Adobe calls it a stroke. In addition to color, other properties can also be customized.

#### Convert Outline to Object vs. Convert Stroke to Outlines

This is the process that will separate the edge color from the fill color and make it into an individual vector object.

#### Guidelines vs. Guides

Both programs have a type of line that can be used for aligning objects. Corel calls them guidelines while Adobe has named them guides.

#### Dynamic Guides vs. Smart Guides

Each program can make alignment lines visible when they are needed. In CorelDRAW, they are dynamic guides and Adobe terms them smart guides.

#### Wireframe View vs. Outline View

Typically, while designing, you view a full color representation of your design, but there are times when you want to see only the outline of each element or object in your drawing. Both programs have a view mode to do this. In Corel, select View > Wireframe. In Illustrator, you would choose View > Outline.

#### PowerClip vs. Clipping Mask

There are times when you will want one or more objects to have their visible shape defined by another object, kind of like pasting those objects inside another. Corel calls this PowerClip and is begun by choosing Effects > PowerClip > Place Inside Container. Adobe refers to this as a Clipping Mask and is achieved by selecting Object > Clipping > Make.

#### Convert to Bitmap vs. Rasterize

There are times when you'll want to make selected objects in



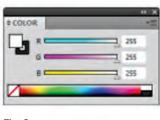


Fig. 3

your drawing into a bitmap. While most elements in a drawing are vector based, sometimes it is best to make them into a raster-based bitmap. In CorelDRAW, go to Bitmaps > Convert to Bitmap. Adobe has the same process by choosing Object > Rasterize.

#### Macros/Scripts vs. Actions

Both programs can automate certain tasks. Corel calls them macros or scripts. Illustrator calls them actions.

#### **Power Trace vs. Live Trace**

Both programs have an automated feature to trace a raster image into a vector image, each with different options.

#### **Export for Web vs. Save for Web**

Both programs have a specific command to create the file needed when your design is destined for the web. In Corel, choose File > Export for Web and Adobe users would choose File > Save for Web and Devices.

#### View > Pixels vs. Pixel Preview

Each program allows one to see exactly how a pixelated image will appear on the web by choosing View > Pixels in CorelDRAW and View > Pixel Preview in Illustrator.

#### Combine vs. Compound

Sometimes there will be two or more objects that you'll want to merge into a single object. In Corel, it is called combine and Adobe calls it compound. Fig. 4 has a comparison of two individual objects at the top and the two combined at the bottom.

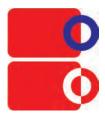


Fig. 4

#### **Break Apart vs. Uncompound**

The bottom object is comprised of three sub paths. The Break Apart command in CorelDRAW separates them into three individual objects as does the Uncompound command in Illustrator.

CorelDRAW and Adobe Illustrator are both very capable design programs that have nearly equal abilities, but the terminology is quite different between the two. Though I invite questions, since I no longer have a working copy of Adobe Illustrator, I will only be able to answer questions regarding CorelDRAW. There are, however, many good books and tutorials available that are specific to Illustrator. Questions, comments and/or insights should be directed to dezenderl@gmail.com.

## Myths About Social Media

By Kristine Shreve

#### As you start your business, get off on the right foot online

Kristine Shreve is the founder and CEO of Kristine
Shreve Consulting, which offers writing, marketing,
and business development services. The company
can be found at www.kristineshreve.com. Kristine
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Kristine was the Director of Marketing for Ensign
Emblem and EnMart from 2006 to April 2020.

There's a lot of disinformation circulating about social media today, and not all of it in the posts on the various platforms. Social media can be complicated to use, at least when using it for business purposes, and there are a lot of myths about how and why a business should use social media. So called "experts" will advocate things that simply don't work, and which may even harm your success on social media. Because there are a lot of half-truths and untruths out there regarding how social media can benefit a business, or how it should be used for business purposes, we want to bust some myths, and help you find the path to true social media success.

My customers aren't on social media – Let's look at some stats to bust this myth. The number of social media users in the United States in 2021 was 233 million with a penetration of 90%. America also has the third largest social media audience after India and China. According to the Pew Research Center, most people who use social media visit their profiles daily and, while younger people tend to be the biggest adopters and users of social media, its use among older adults continues to grow. While it is possible that your entire customer base is not on social media, in most cases, it's pretty unlikely.

Handle negative feedback by ignoring it — We'll all get one at some point, the dreaded one-star review, negative comment, or customer complaint. Some people think the best way to handle anything negative that shows up on your social media profiles is to delete it or ignore it, but nothing could be further from the truth. Look at a bad review or a negative comment as a way to tell your side of the story, not with anger, but with confidence and clarity. Transparency is a buzzword these days for a reason. Use negative reviews or comments to make your business dealings transparent, and to let your customers know you're responsive to problems and committed to providing the best possible customer service.





This is a myth that wastes a lot of time and causes businesses to expend a lot of effort. It isn't about being on all the platforms, it's about being on the right platforms. And yes, there is a difference. If you've done your homework, studied your market and know who your target customers are, you'll also most likely know what social media platforms they're likely to use. Those are the platforms your business needs to be on. It doesn't matter if Facebook is for fuddy-duddies or Tik Tok is trendy, if your prospective customers aren't there, it won't do you any good to be there. Remember, your goal in using social media for your business is to make connections with your customers, and you can't do that if you are where they aren't.

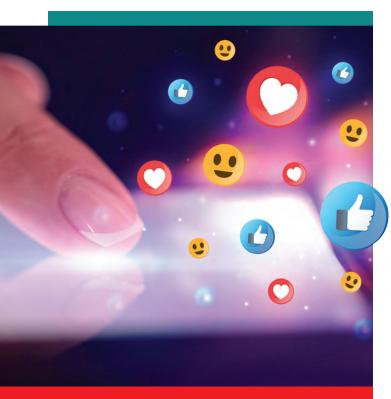
Quality over quantity when it comes to followers or fans – I have to admit, this was a myth I perpetuated myself for a number of years, and I still think there's some truth to it. You need to have a core group of people following your profiles who are in your target market and are statistically likely to become customers. That doesn't mean, however, that you also shouldn't concentrate on expanding your social reach. A larger reach means you gain more access to the fans and followers of those who follow you. Your social proof and social media clout improves, and if even those people who aren't necessarily your target customers share your content, your SEO improves too. So, in this case, finding a good balance is key. You want to have enough followers or fans so that your reach continues to grow, but you also want to have a core group who are likely to buy.

MYTH 5

I can publish the exact same post across all my social media accounts – No, you can't. And you shouldn't. Here's why: Each platform designs posts to work in a slightly different way. Some have character limits (Twitter). Others (Pinterest and Instagram) are centered around pictures and don't use words nearly as much. Some platforms (YouTube and Tik Tok) are about video. While you can cover the same subject on each of these platforms, the post will have to be structured differently to meet the requirements of each platform. Yes, it's more work. Yes, it's more hassle. And, yes, it's also the way to ensure that your post does its job on each platform and ultimately drives sales for your business.

I can set up a new profile on Monday, and see results by Tuesday – OK, so this is an exaggerated version of what some people think, which is that they can set up a social media profile and see results in a month or two, three at the most. The reality is that social media is a marathon, not a sprint. Once a profile goes up, you still have to populate it with content, make connections with people on that platform, build trust, and create a community. All those things take time. You have to be consistent in posting, responding and engaging. Yes, there are exceptions to this rule but, in general, it will mostly likely take between six months and a year before you see substantial results.

The number of social media users in the United States in 2021 was 233 million with a penetration of 90%. America also has the third largest social media audience after India and China.



## SOCIAL MEDIA TECHNIQUES

By Aaron Montgomery, Our Success Group

Social media is all about posting, engaging, and getting people interested in what you share. Trust me; few people are interested in your latest sale or the products you offer. Our goal is to get them interested in that stuff with social media, but you can't start with that. So, the technique is two-fold:

1) You have to design your posts and what you plan to share around what your potential customers might like. This starts by understanding and having a niche market to best share or post the things they are interested in.

2) Have a plan. Many people call it a content calendar, but at its core, it is just a plan of what you are going to share and when that will best get the potential customers to engage with the information.

Engagement can mean different things, for example, hitting the like button, commenting, or sharing a post with other friends. This should look a bit like this: Your niche is your local school spiritwear market. Your potential customer wants details about the schools, and they want to feel a sense of pride in the school they are associated with. Your content calendar might include sharing details about the latest news around the schools, the latest up to date sports schedules, and sparingly, the products you offer that can help them show their school pride.

be sales posts – We've all seen it, the social media feed that is nothing but a picture of a T-shirt and a sales message, posted over and over again. Usually feeds of this type have tumbleweeds rolling through them. No one likes to be constantly sold to, not in real life, and not on social media. The type of feed like the one I described is the social media equivalent of grabbing a bullhorn, standing on a table, and shouting your sales message at the surrounding crowd. If you're in that crowd, are you inspired to buy? Would you stay around to listen to the message? Would you ever bother with that company again? To sell on social media you need to build trust and community. That means you need to vary your posts, make sure your content is interesting and engaging and respond to what's happening around you and to those who interact with your page.

I'm a social media success if I have huge follower or fan numbers — This is tangentially related to the quality over quantity myth that was busted above, and it pretty much follows the same format. At its core, your social media following should be made up of people who are engaged in the content you put out and interested in what you have to offer. A larger number of fans or followers can help increase your social proof and inspire others to follow you, but the success isn't in having a large number of people following you, it's in having a large number of engaged, interested, and above all purchasing people following you. It's a subtle difference, but an important one.

Influencer marketing is the silver bullet for selling

— As social media has become more and more popular, we've seen the rise of the influencers, people who have built huge social media followings and make their living selling goods and services to those followers. Influencers can be useful in certain situations, but they aren't the only, or "best" way to sell on social media. Working with an influencer also requires a lot of due diligence. Make sure that you check credentials, social proof, and that the influencer in question can demonstrate a visible pattern of sales among their followers when an item is recommended. Like a lot of people who set up their shingles on the internet, influencers are not vetted. It's a case of buyer, or seller, beware.

MYTH 10 Social media marketing is the only marketing you need – This may be the most dangerous myth of all, and it has two sub-myths. One is that simply having a profile on a particular platform is enough, and you don't have to put a lot of thought or effort into what you post or when and how you post it. The second is the idea that people only rely on social media, so any other kind of marketing is a waste of time. In reality, a well thought out and maintained social media strategy is a vital part of a good marketing strategy, but it's not the only part. Make sure you're also tending to your website, creating connections, networking at trade shows and local events, attending to analytics, and adjusting your target market prospects on a regular basis. A complete marketing plan is the best marketing plan, and social media is only one part.





## Core Functions of a Strategic

## Business Plan

**By Aaron Montgomery** 

#### Create a working roadmap for your business

Aaron Montgomery is certified by New York Times bestselling author Jack Canfield as a Success Principles
Trainer and is the co-founder of OurSuccessGroup.
com. Aaron has over 25 years of experience
with personalized products and small business
development and is the co-creator of the "5 Keys
of Business Success." You can also find Aaron
co-hosting the decorator's industry podcast 2
Regular Guys Podcast (www.2regularguys.com). Also,
check him out on his podcast channel Small Business
Saturdays (smallbusinesssaturdayspodcast.com).



'm a huge proponent of business planning, yet many people feel the business plan has about the same worth as a toilet paper roll. Single-use and then put it somewhere where no one has to deal with it again. But the business plan is the simple art of working on your business, not always in your business. Planning strategically is more valuable to your long-term success than any other task in your business. As Dr. Stephen Covey said in his book "7 Habits," "All things are created twice. There's a mental or first creation and a physical or second creation."

When I talk about business planning, it has very little to do with polished SOPs and carefully crafted executive statements. Remember, business planning is the art of working *on* your business, not always *in* it. Business planning is taking the thoughts in your mind and exporting or writing them out into something you can implement and make core to your business. As a success principles certified trainer, I see the business plan roadmap like the fundamentals we should live by.

#### **CORE FOUNDATIONS OF A WORKING BUSINESS PLAN**

Clarify Your Reasons – For anything to be successful, your reasons need to be greater than your excuses. We are all 100% responsible for our results. And in business, that comes with a lot of responsibility. The nice part is that the same responsibility also comes with a lot of empowerment. To best focus that empowerment, you must know why it is important. There will be days when you work hard climbing the ladder and discover your ladder is leaning against the wrong house. With a strong reason, those setbacks will be nothing more than a learning experience, and you will not lose any enthusiasm due to the power of your reason for being a business owner. But without this clarity of reason, as a business owner, you have just created another job for yourself with lots of extra responsibility and none of the security.

Becoming a Goal Getter – There is a difference between a goal setter and a goal getter that goes a little deeper than the G versus the S. As a goal getter, you are going to set goals in such a way that not only is it extremely clear, but it is also believable by you. With that clarity, our subconscious brain now has the vision that tells it the goal is worth expending your valuable energy towards. So, get extremely specific about what you want. Many times, I notice money goals are just a cheap way out from explaining what actual impact you plan to make. With a clear

"When I talk about business planning, it has very little to do with polished SOPs and carefully crafted executive statements. Remember, business planning is the art of working on your business, not always in it."

goal in mind, the next step is to set some milestones along the path to help you see that it is possible. You don't have to know all the steps, but by guesstimating some steps, you will build up the confidence to fully believe your goal is possible. These milestones are crucial to achieving turning point goals. Most people have heard the saying, "I'll believe it when I see it," but the truth is you will only see it once you believe it.

The Relationships – As we plan for our future success, we must make sure that we are clear about the relationships that our business has or will need with all the stakeholders involved. Henry Ford said, "Coming together is a beginning, staying together is a process, and working together is success." Even if you never plan to have employees, this step is crucial.

I believe that success is a team sport. To be successful, you must surround yourself with success, and as Jim Rohn said, we are the average of the five people we spend the most time with. It would help if you looked at the key stakeholders, vendors, mentors, and other people who will play a role in this plan coming to fruition. By defining these roles in our first creation, you make the space to attract those people to your business. To clearly define

## Time is Money

By Dana Curtis, Biztools

What do hotel rooms, dentist chairs, and your business's production equipment have in common? They only make money when they are being used. When your business relies on a piece of equipment to operate, unused inventory is useless inventory.

Whether it's a digital printer, router, plasma cutter, embroidery machine, engraver, vinyl cutter, or a McDonald's milkshake machine, it's likely a major part of your business that you can't live without. You rely on it every day, and it's the cornerstone of your business.

Find out what you should know when purchasing capital equipment at https://gpro.link/capital.

those other relationships, it is always best to start with yourself. What will your role in the company be when your business has reached that peak idea of success? Without this knowledge, you will not know who to surround yourself with.

Marketing Groundwork – Many believe marketing is your Facebook posts, email marketing campaign, or Google Ads campaign. And that belief leads us to a lot of wasted time and money. Marketing is 95% about understanding your *ideal* customers and doing the work to determine the problem you solve for them. And don't let the word "problem" hold you back, thinking that you have to solve some major world problem.

Every day you solve a problem for your customers, which is why they exchange money with you for your products and services. Pinpoint what the problem is, determine exactly who the ideal customers are, and then those things we believed were marketing are much more manageable. You will know exactly what to say in your Facebook post. The email campaign will reach the right people who need your solution, and the Google Ad will have the right keywords to attract the right customers for your business.

Numbers Game – Some may have heard I'm a #Datahipster. Yes, I love a good spreadsheet, but I'm not suggesting you focus on your number to count the beans. We need to ensure we are clear on the numbers surrounding our business as a measuring stick or way to know what is working and what is not.

As management guru Peter Drucker said, "What gets measured gets managed." You have to keep score for success, which starts with a clear understanding of what it costs you to be in business. Knowing your numbers is always the first step we tackle anytime we have a new member at Our Success Group.

Other numbers to plan for are your pricing strategy and the key metrics that will lead you to success. And then the final number that most people forget to manage is your time. When was the last time you did a time study to understand why you are so busy or why you can't seem to get anything done? If you persistently measure, track, update and improve, you are guaranteed success.

With those five items, you have a great start. As you continue to build, grow, and evolve your plan, you can add to the workflow details to improve efficiencies. My view of a business plan will be somewhat unconventional, and some don't like how messy it can look. But planning is the act of creating, and creativity is messy. It is not so much a business plan as a business operation guide always in review.

Your business plan should never get pitched to the side and is the tool that guides the way you can operate your business. It becomes the central repository for all the documentation of "This is how company XYZ operates." When you design your business to have concrete values and a well-thought-out process, you won't ever feel like you have worked a day in your life.

## WORKTABLES

## **Are Shop Workhorses**

By Paula Aven Gladych

#### Functions and features of today's graphic shop staple



Paula Aven Gladych is a writer based in Denver, Colorado, who has been covering the graphics industry since 2014. She can be reached at pgladych@gmail.com.

Worktables have evolved so much in the past few years that it is rare to enter a print or graphics shop and see a table that acts as just a table. More modern versions of this print shop staple function as light tables, a place to cut, laminate and mount graphics. The devices help shops streamline their workflow by allowing one person to handle jobs that used to take more than one person to do.

#### **EFFICIENCY & PRODUCTIVITY**

Dawn Bent, co-owner of a Signarama franchise in Huntington Station, New York, purchased a ROLL-X Multipurpose Applicator table from ROLLSROLLER a year ago.

"After 33 years of traditional hand application or using a laminator, I broke down after trying it out at a trade show and knew it would be a game changer," she says. "And it has been."

The learning curve was steep at first with "a lot of failure and recurring and reprinting of vinyl materials," Bent says. But once her employees got the hang of it, she says the amount of waste produced in the shop has gone down tenfold.

"From that point of view right there, the thing pays for itself as far as I'm concerned. I don't have to yell at anyone when I see things in the garbage," she says with a laugh.

Dawn and her brother Mike Ziccardi started the franchise in 1988 as a 1,100-square-foot vinyl shop that has since expanded



Dawn Bent and brother Mike Ziccardi coown Signarama Huntington Station in New York. (Image courtesy Signarama Huntington Station)





into a 24,000-square-foot building that offers full manufacturing of electrical and architectural signs, sign products, channel letters and vehicle graphics.

Before buying the ROLL-X worktable, Bent and Ziccardi insisted their staff "should know how to do this the old-fashioned way," she says, "and then we gave up."

Signarama's employees use the table to mount masked vinyl and digital prints onto various substrates.

"If we need to laminate, we don't need to unload a lamination machine. We cut the sheet off for what we need and apply it to one project," she says. "That's another time saver and material saver for us."

The table is  $5' \times 11.5'$  — wide enough to allow for a 54'' digital print.

"Our old table was a  $4' \times 8'$  plywood table and prints were always hanging off the sides. Now the whole print fits on the table. It is positioned in the middle of our production room with a laminator on one end of it."

Signarama makes a lot of its signs on HDU materials. After they come out of the paint prep room, staff use the table to apply paint mask material, protective covering to put on the CNC router. "We used to do it by hand, too," she says.

The worktable has an adjustable height feature that works great if employees are different heights. They can raise or lower the table to fit their own ergonomic needs. Employees also like that the table is illuminated, which "helps them weed on white vinyl because they can see the cut marks better. If they are doing an overlay on multiple colors, it helps you see through the substrate," Bent explains. "It definitely has contributed to the overall efficiency or productivity in the workplace."

#### **SIZE & SPACE**

Raum Divarco, general manager of CUTWORX USA, maker of CWT flatbed applicator tables, says that most smaller mom and pop or residential print shops won't have equipment to print on rigid substrates. Most of them will start with roll printers or plotters, a worktable to mount prints on rigid substrates and a digital cutting machine.

CUTWORX sells smaller table sizes, entry level options to get people started, Divarco says. If a shop makes traffic signs, for instance, they wouldn't need a 10' table if they are only mounting blanks for smaller road signs. If they are doing fleet graphics or highway signs, they will need longer tables to pre-mask blanks.

One of the biggest considerations is space. The company's more high-end worktables have lift kits, lights, a heat-assisted roller, and cost nearly \$35,000, so a shop wants to make sure they have room for it so it can be used properly and not just end up "as a table collecting boxes," Divarco adds. "That can happen in the blink of an eye. You get busy and it becomes a collection tray, and you damage it."

Price isn't as much of a consideration because there are so many platforms offering so many sizes it is easy to find the table size a shop needs for a good price that will fit the space, he adds.

Shops that have the luxury of extra liquidity might want to opt for a machine with a higher price tag because it "generally means you will get more premium rubber, which is pretty important when using it for a pinch roller for lamination," Divarco argues.

He adds that clients do come in with size and space restrictions thinking they will want a lower end model but will leave with a more expensive one after seeing a hands-on demonstration and realizing it will alleviate workflow bottlenecks.

Visual Horizons Custom Signs is a full-service commercial sign company based in Modesto, California, which has been in business for more than 25 years, offering non-illuminated signs, banners, engraving and vehicle wraps. The company also chose a  $5' \times 12'$  ROLL-X worktable to help increase efficiency of its production space.

The company chose the table because it "fit in our workspace and was larger than the widest material we print on," says owner Charity Jackson, "so it accommodates all printed graphics and signs we run through production."

The key features the shop looked for in a worktable were size, the clearance of the application roller for different substrate thicknesses, the height controls so it could be raised and lowered as needed, the backlit work surface, and the extra storage and cutting tool.

"Since we're a busy shop with few employees, it's important for us to be able to quickly apply signs with as few people as possible," says Jackson.

The table includes a roll holder glide beam that is used for applying masking tape. The company orders 54"-wide rolls of application tape and mounts them on this bar. "One person can mask graphics 52" wide × 12' long in seconds, with even pressure," she says.

The height control under the roll beam is very important. In the past, when the company used its laminator to apply graphics to substrates "we were sometimes limited by the space available under the roller," Jackson says. "The application table has plenty of clearance under the roller, allowing us to place nearly any substrate thickness on the table and apply graphics."

The table itself also can be lowered to 33", allowing a person to sit in a chair to work at the table, or raised up to 42", giving taller workers a more ergonomic work surface. When the table is lowered all the way down, the wheels make contact with the floor, allowing the table to be wheeled around the production floor as needed.



Signarama's employees use the table to mount masked vinyl and digital prints onto various substrates. (Image courtesy Signarama Huntington Station)



After seeing the worktable at a trade show, Dawn Bent knew it would be a game changer for her shop that had been using traditional methods for 33 years. (Image courtesy Signarama Huntington Station)



Visual Horizons chose its table because it worked for its space and accommodated all printed graphics and signs it runs through production. (Image courtesy Visual Horizons Custom Signs)

#### INTRODUCTION TO

## WAYFINDING

By JD Hamilton

#### Directions to guide yourself through a successful system



James Dean Hamilton has been writing for NBM since 1995. After a decade sabbatical from writing, he is back in the saddle. With over 30 years of experience, he has vast experience in everything signage and marketing, and workflow management.

Wayfinding is an integral method of guiding people from one area to another in an unfamiliar place.

Definition – The basic art of getting people from point A to point B. The dictionary defines it as the process or activity of ascertaining one's position and planning and following a route. You can look at wayfinding as the visual language of moving people through space.

History – Wayfinding is as old as signage and has its roots intricately tied to it. It dates back to when most people could not read, and shops like shoe cobblers would hang a large shoe on their building, and blacksmiths would hang a carved anvil, so people knew how to find them. Ironically, wayfinding as a discipline of signage only began to evolve as a standalone discipline starting in the 1950s, and its importance has quickly been rising since.

#### PRINCIPLES TO SUCCESSFUL WAYFINDING

- **Create an identity at each location:** This is the tie-in with signage. Your final destination needs to be easily identified.
- Use landmarks to provide orientation cues: This can either be a physical reference, a sign at a location, or another part of the wayfinding system that keeps travelers moving in the right direction.







- Create well-structured paths: While usually well beyond the scope of work for signage, architects, builders, and contractors should be mindful of a safe and open "pathway" for the traveler.
- Create regions of differing visual character: Ah, theming and branding. We will cover this in more detail. But all successful systems must have directions that are sized appropriately and easily read.
- Don't give the user too many navigational choices: Think of the overly complicated instructions back in the day by Sears and Roebuck to assemble furniture and contrast that to the simple instructions by Ikea. KISS – keep it simple stupid!

#### 4 COMMON TYPES OF WAYFINDING

While we could spend a whole series of podcasts on wayfinding, in the interest of time, let's discuss four primary types and compare and contrast them.

#### Wayfinding from a Vehicle

Over the years, it has become more popular for tourist and historic main street projects to include some type of wayfinding system for people in vehicles. These systems need to consider that they are read from a distance and take a traveling vehicle's speed into account. There are many sources from the Department of Transportation that discuss size and best sans-serif font types to be used and vary upon the desired reading distance. Often reflective backgrounds will be mandated by code. You will often see these systems have several sign types of varying sizes that are used at thoroughfare (where cars are moving at a higher speed), smaller signs at stoplights, and special sign types in slow-moving downtown/historic areas that have the hybrid job of communicating directions to both vehicular and pedestrian traffic. Outskirt wayfinding and historic wayfinding in the same system are often differentiated by unique sign types.

Keep in mind that many of these signs are installed in rightof-ways, so DOT guidelines must be followed. They often will need a stamped engineered drawing, and most importantly, utility checks will be needed before any installation. I have seen a lot of companies underestimate the time and expense needed to cover these requirements.

The dictionary defines wayfinding as the process or activity of ascertaining one's position and planning and following a route. You can look at wayfinding as the visual language of moving people through space.

Parks, Zoos & Universities
Directions to fun and games or getting to that boring English lecture? These projects have a lot of creative potential. They also often have the unique wayfinding "buddy" — the park map — that is usually given out with the entrance ticket or the multi-thousand-dollar tuition bill. These two resources, when created with the same goal, can be invaluable to the traveler. Like the signage for vehicular traffic, these signs are usually exterior but can be smaller since pedestrian traffic is moving by foot. For both, it is important to design and fabricate with appropriate materials that can handle harsh environments, UV rays, and regretfully a potential vandal with a can of spray paint.

Let's use zoos as a fun example of creative wayfinding. Often, they will have several different exhibit areas. Wayfinding can direct, identify, and expand the experience for the traveler. They



#### **Guidance on Wayfinding Projects**

Listen to JD Hamilton break all of this down and more on The GRAPHICS PRO Files. http://gpro.link/jd



03. Trail Head Id 1 - SF Unit(s) 1/2 = 1' 0"



In many state and federal parks, you'll find HDPE (high-density polyethylene) in two-color substrates. The material is CNC carved through one color into another, often brown and white or golden yellow and green.

may have an "Australian Outback" area with kangaroos and koalas. This area could have an Aboriginal carving for a post, so the traveler knows they are in that portion of the zoo. An "African Safari" exhibit featuring elephants, hippos, and lions could have another look. The typeface, colors, and size of the actual signage should be consistent throughout the zoo, but the unique location could be modified in several ways to let the visitor know where they are. You often see rentals available for audio experience, and in today's modern world, apps can be downloaded to give cues and background information along the journey. Wayfinding in today's world is more than just signage.

For universities, you often see modular architectural post-andpanel systems made of extruded aluminum components. These systems are designed for modifications or additions, featuring the school's colors and logo.

Many state and federal parks prefer the use of HDPE (high-density polyethylene) in two-color substrates where you CNC carve through one color into another (often brown and white or golden yellow and green). This is highly durable and very vandal resistant.

#### Health Care Facilities & Airports

These systems are primarily interior, so there is not as much emphasis on the harsh environments found in exterior wayfinding. However, ADA (Americans with Disabilities Act) can often be a requirement. This can vary from state to state and municipality to municipality. So, you need to do your research on what is required. Typically, "directional wayfinding" does not need

raised copy and Braille, but destination and room signage will require it. The key to a successful system is tying them all in with the same colors, fonts, frames. Keep in mind, to meet ADA requirements on the room signs, you must have high contrasting colors, matte (or non-glossy) backgrounds, as well as appropriate Braille and raised sans-serif copy. These requirements could impact the look of the overall wayfinding system.

A lot of work goes into sign types and message schedules, and it is imperative to pay close attention to travelers coming off an elevator and placing the initial wayfinding in a location that quickly and easily directs left or right. Additional wayfinding is also found at the end of hallways, and the design and installation need to be looked at carefully if it is to be wall-mounted or hanging.

Airports are a unique situation. There is somewhat of a standard found amongst airports. They often have large open areas and concourses. So, wayfinding needs to be designed to be easily read at a distance — often large copy seen in vehicular systems. Each airport has its own special color scheme and creativity, usually found in unique large identification signage going to concourses, identifying departure or arrival gates.

#### Corporate & Retail

For corporate locations, you can follow the guidelines of health care, but the expense and amount of wayfinding are not often needed. This system in the past was often handled with a changeable building directory that identified which floor to go to and another smaller directory of what businesses are located on the floor when exiting a stairwell or elevator.

As a sign maker, I hated these jobs that required updates from a company that either formerly created it decades ago or went out of business. It was hard for the property manager to justify paying the price to add one new tenant and even more frustrating to do this job as a loss leader for potential other work. Most of the time, it was a lose-lose relationship for both.

Enter technology! Today there are a variety of interactive electronic directories. These not only deliver wayfinding information, but they also offer the ability to communicate other helpful information. Advertising can even be sold, and property managers can make these new directories into a revenue maker! Time, weather, and other info can be communicated. Best of all, the property management, after purchasing the unit and having it installed, can make their own updates.

Depending on the corporate and retail size and requirements, these systems can be static running info on a loop or a touch-screen where the visitor can have an interactive experience. For example, where can I get lunch after my appointment?

#### **BANDING & THEMING OF WAYFINDING SYSTEMS**

Far and away, the biggest change and improvement to successful wayfinding systems involves creative design that projects a unique experience for the traveler/visitor. This goes across the board for any wayfinding project.



While the primary purpose is to provide clear and concise directions from one place to another, the visitor can be emersed into a themed environment. The primary importance of having easy- to-read sans-serif copy on a contrasting background with clear graphics of arrows and directional symbols remains. The ability to work with unique sign shapes, materials and incorporate header graphics or logos not only aids the visitor in knowing where they are but creates a branded image for the company or organization that is directing them.

This is the area where successful designers and fabricators can thrive, strut their stuff, and deliver a unique and valuable product and service for their clients! The journey can be the experience. Crafty designers realize beyond getting travelers and visitors successfully from point A to B that they can create an experience for them. This is where interpretive graphics and signage along the route can fully be directed, educated, and immersed in a branded and themed environment.

Think of visiting a zoo. Sometimes you may come across lion paw prints in the walkway, letting you know where you are. Perhaps some signage that describes the vegetation of Africa explains the habitat. For corporate wayfinding, this is a great opportunity to give historical milestones of a company's achievements. Wayfinding opens the door to express and educate more than just directing.

#### WHERE DO WE GO FROM HERE?

There is no wayfinding to give that direction. With advancements in materials and technology, there are sure to be new changes that will help people get where they want to go. Other media like apps may be used on mobile devices that not only direct you on your path but in some systems may also allow an interpretive experience on the journey there. Remember, the key is "how" to go, not "where" to go. Although being in the trenches, we may resort to the latter.



#### Digital Signage

Explore how digital signage can play a role in wayfinding

http://gpro.link/wayfinding

## EXPAND YOUR BUSINESS WITH A

## Large-Format Laser

#### Industry experts share what to consider when upgrading

By Julia Schroeder



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arge-format lasers allow shops to customize any size and shape of wood, rubber, metal parts and more. Perhaps you want to jump right into wide-format laser engraving and cutting, or you may have thought about taking the leap from a smaller laser to a bigger one, but when is it the right time to make that commitment? There are several components a shop must consider, such

as power requirements, space, the expansion

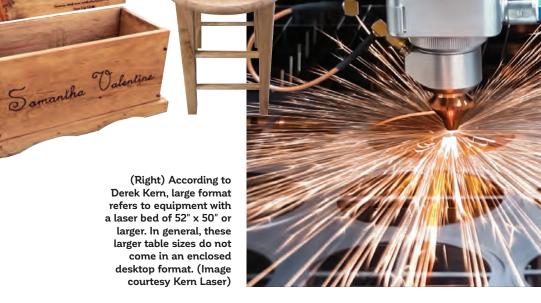
of inventory, and maintenance.

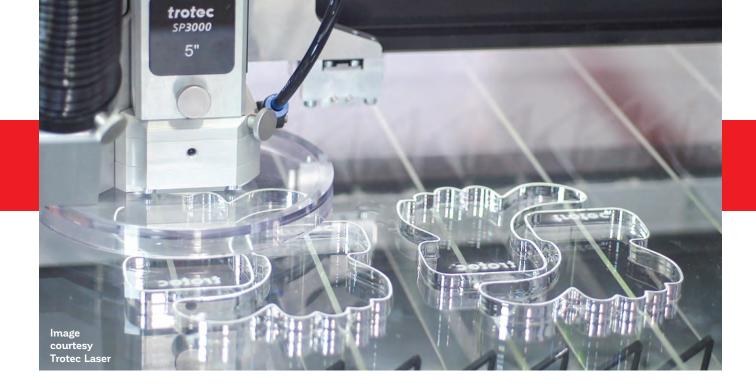
But first, what qualifies as a large-format laser? The main difference between traditional and large-format laser equipment is the size of the system, says David Stevens, Trotec Laser. The larger the system, the larger the application can be.

Kern Laser's Derek Kern refers to equipment as large format when the laser bed is  $52" \times 50"$  and larger. In general, these larger table sizes do not come in an enclosed desktop format, as you typically see with smaller systems.



With large-format systems, you can engrave something as small as a peanut to as large as a 10-foot monument or bigger. (Images courtesy AP Lazer)





Large-format machines provide accurate, efficient, and broad capabilities like any flatbed laser system, according to Stevens. These laser machines are ideal for businesses that work specifically with large-format textile, acrylic, film and foil, and other cutting applications. With expansive working areas and more power, large-format laser systems can provide high-quality results.

#### **OUALITIES OF LARGE-FORMAT LASERS**

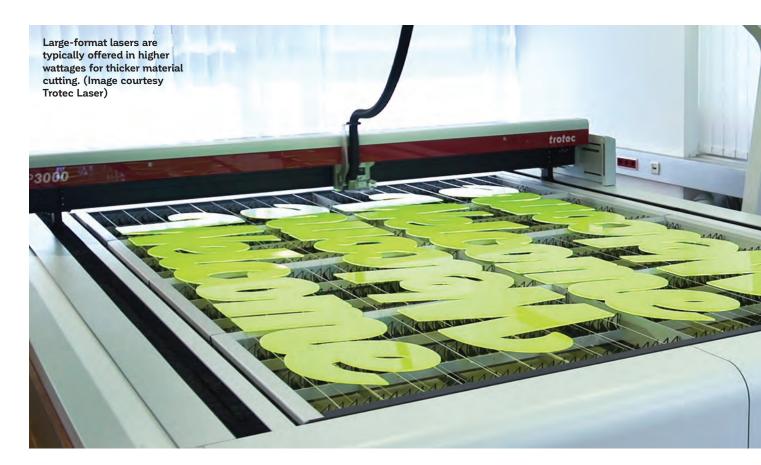
Large-format machines make it possible to laser engrave and cut industry-standard sheet stock such as plywood, MDF, plastics, and more. According to Stevens, large-format lasers are also

typically offered in higher wattages for thicker material cutting. "More traditional laser systems hold the advantage of faster processing speeds due to the smaller, lighter motion systems when engraving and/or cutting thin materials," says Stevens. "It is becoming more common for laser manufacturers to offer both types of laser systems to accommodate their broad customer range."

The end uses and applications of large-format lasers can include large-scale photo engraving, LED edge lighting, headstones, and furniture. Mandi Smallwood, AP Lazer, says it allows funeral/monument companies to add a special touch while engraving a casket or adding a photo to a monument. It is also beneficial to sign shops and woodworkers, according to Smallwood. Sign shops can fabricate larger outdoor signage, while woodworkers can personalize furniture that would not be able to fit in a box top laser, such as a large live-edge table or a stool.

The main benefit of large-format lasers is not being limited by the size of your laser, Smallwood adds. With large-format systems, "You are able to engrave something as small as a peanut to as large as a 10-foot monument or bigger," says Smallwood.







With a large-format laser, material loading and unloading is performed less often due to the large sheets the machines can accommodate. (Image courtesy Kem Laser)



"Large-format machines utilize many of the same easy-to-use softwares that other smaller desktop models use," says Kern. Additionally, Kern says large-format lasers have high yields and low system downtime. "Lasers have a thin cutting kerf which allows parts to be nested tightly together, maximizing the sheet yield," Kern explains. "The system naturally needs to be touched less often versus a small-format machine. Material loading and unloading is performed less often due to the large sheets the machines can accommodate."

#### WHAT TO CONSIDER WHEN UPGRADING

A few factors play a role in upgrading or purchasing a large-format engraver. "One would be if you're looking to increase production and do more items at one time in a large bed," Smallwood says. "Another would be having the capabilities to engrave anything you can imagine."

The point at which it is best to upgrade can vary from application to application, Kern says. "It is important to not only look at it from a number-of-parts to produce aspect, but also from a quality side."

Stevens says to consider the following



before investing in a large-format laser:

- 1.) What's your biggest material size when processing sheet stock?
- 2.) How large are your production runs?
- 3.) How do you want to use your laser, and how much laser power is necessary?

The size of your material determines the size of the laser machine that you will need, but batch size may also be a factor. For example, if you are processing a large order with multiple parts, they can be processed in one job with a larger working area, saving time, and increasing productivity.

"The most important criteria when selecting the power of your laser machine is the primary application you will process most frequently with the laser," explains Stevens. "If the laser is mostly used for engraving, you will achieve good results with laser powers between 25 and 80 watts and will not require higher power." For laser cutting or high-speed applications, Stevens recommends a laser power of more than 80 watts.

"Every laser varies between type, model, and manufacturer, so make sure you not only have the space for a large piece of equipment, but also the electrical and ventilation requirements," says Stevens.



Large-format machines provide accurate, efficient, and broad capabilities like any flatbed laser system.



mage courtesy Trotec



Image courtesy Kern Laser



Let your community know what you are capable of and get ready to bring their ideas to life. (Image courtesy AP Lazer)



Image courtesy Trotec Laser



Shops can make the most of their large-format investment by taking advantage of the size and capabilities. (Image courtesy Trotec Laser)

With higher wattage options comes higher power requirements. Stevens explains, as a rule of thumb, any CO<sub>2</sub> system over 100W will typically require a 220V supply as compared to a 110V.

Most large-format machines are available in several electrical configurations that are common in more industrial type buildings, including 230V/single-phase, 230V/three-phase and 460V/three-phase, Kern adds. When upgrading to a larger system, Kern suggests asking your salesperson about processing bed variations.

Every material acts differently and the cutting bed, whether it is acrylic slat bed, aluminum honeycomb, or another metal structure, can deliver benefits to your end product. Additionally, make sure to keep enough room around the machine to not only accommodate the operator but to load/unload and perform the maintenance operations required on the machine.

#### MAKING THE MOST OF A LARGE-FORMAT LASER

Shops can make the most of their largeformat investment by taking advantage of the size and capabilities, says Stevens. "Since laser processing is extremely versatile and allows you to process a wide range of materials, consider expanding your business into new industries." For example, if you previously focused on producing B2B signage and finishing for displays and print materials, you can consider incorporating B2C (business-to-consumer) applications such as personalized signs and wall decor.

Additionally, investing in proper training is worth it. "Not only should your operators learn how to use the machine properly, but they should have in-depth application training," Kern says. You can also refer to your laser company as the sales teams consist of knowledgeable experts in the laser industry.

"You are able to engrave anything you put your mind to, minus a few hazardous materials," concludes Smallwood. "Get the word out in the community what you are capable of and let the customers bring you their ideas, and you bring them to life."



#### A Note on Laser Power

The laser power can be easily regulated by the software, while the maximum power depends on the hardware. Higher laser power offers great flexibility as it allows you to process many different materials and reach higher speeds.

Different materials will produce different results that will vary based on the makeup of that material, as well as the color and surface finish. It is important to use the appropriate laser parameters for each material to achieve the best result and to not overpower the material. There is higher risk associated with increased laser power, so it's important to only use what is necessary. Also, the material needs to be flat when dealing with certain models because of how close the head is to the material when processing.

-David Stevens, Trotec Laser



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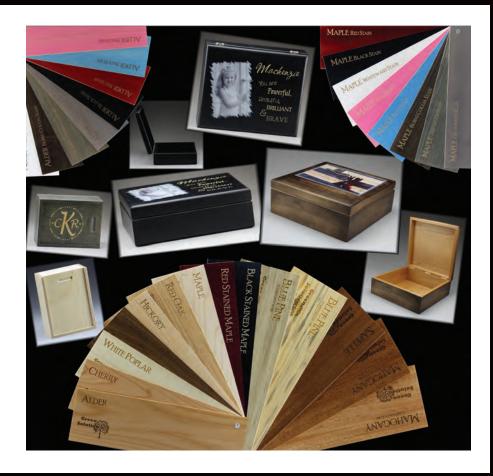
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