



Here is a retail sign that could be done with cut vinyl but as a digital print, the surface is consistent and the look is much cleaner.



Signs like this are also better as digital as the blue line with the red blend and the text make this very expensive and labor heavy with cut vinyl where digital is fast and easy.

Not Just for Wraps



How digital printing can help sell more vehicle graphics.

BY DAVID KING

David King is director of operations for Massachusetts-based Castle Graphics, a large format digital print provider. He has been in the digital printing industry since 1983 and has worked with a number of major manufacturers to help develop new and better technologies. In addition to writing for Sign Business, Dave will present seminars on how to profit from a digital printing business at all Sign Business & Digital Graphics Shows in 2006. He has also produced Inkjet Printing, Laminating and Mounting, an educational video for the Video Classroom series. For more information call 800-691-8047.

MANY ARTICLES tell you about vehicle wraps and how great they are, but... what about clients that do not want full vehicle wraps, but do want nice vehicle graphics?

Today practically all sign shops can do cut vinyl. Depending on the quality of the vinyl, you can pay between 20 cents to a dollar per square foot for a single color of cut vinyl. So, does it make sense to move to digital print vinyl to replace the cut vinyl in the sign shop?

The answer is yes and no.

Let's review the advantages of using digital print vinyl for vehicles. (The good news is that if it works for vehicles, it will work for anything.)

DIGITAL VINYL CHOICES

Let's review the features of digital vinyl. The largest providers of digital vinyl are Avery and 3M. Avery's best seller is MPI 1005EZ and 3M's is 180-10 Comply; both of these films are cast, high gloss, and have the air release system built into the adhesive. Avery has 48", 54" and 60" wide by 150' or 300' or 750', whereas 3M has 54" wide by 150' or 300'. Other companies that offer cast film are Oracal, LG Chem, Arlon, Mactac and others.

All of these films are cast but only 3M and Avery have the air release system. Air release films are very easy to work with as the air release system makes the installation faster and smoother because the air is not trapped in the vinyl causing many small bubbles. How it works is the manufacturers have a special release liner made with diagonal lines etched into the adhesive side of the release liner. Then as the adhesive is applied to the release



The two-color (red and black) logo and the black letters are 100% digital. Must faster, less money and 100% accurate on the two colors. Plus, the installers can now get more trucks done in a day.

liner and then applied to the vinyl it creates a series of thin diagonal lines in the adhesive. Then when the vinyl is applied to the surface of a vehicle/wall, the air travels through the series of lines out to the sides of the vinyl, producing a very smooth and flat surface of vinyl film. Over time the adhesive “wets out” and flows to make a smooth surface and close up the diagonal lines.

Typical time savings is about 20 percent on installations.

ANY COLOR YOU WANT?

As you all know cut vinyl is available in a defined set of colors. Many times I have found the color I want in cut vinyl but the vinyl was not cast; many times the colors available for cast are not the same as calendared vinyl. So many designers do not consider what colors are available for their clients when setting up their logos and graphics.

With a digital printer you can produce just about every color and if your printer can cut vinyl or if you have a vinyl cutter, you can print the color you want and load the vinyl into your cutter and then cut

the logos/letters from the printed vinyl. The only drawback to the digital vinyl for color is that the color is only on one side, the back of the vinyl is going to be gray or white. This is okay for vehicles but for glass or clear surfaces where the colors need to be on both sides, the digital choice is not a good one.

DIGITAL VINYL LIFE EXPECTANCY

Cut vinyl comes in warranty terms like three to nine years. A three-year warranty vinyl film is not designed to last much more than three years (it will shrink or crack or start to peel after that). The nine-year film is designed to go the distance of nine years minimum. With digital vinyl the colors will not last nine years unless you are in an area where the sun does not shine very much and/or the owner of the vehicle waxes the vehicle every six months. Wax has a UV protectant and this will help keep the vehicle looking great for many more years. So if you do a color on digital vinyl and liquid or hard laminate, you can expect five years before the film might start to crack or fade.

SMALL TYPE, BLENDS, IMAGES...

If you have ever cut small letters or lines on your cut vinyl machine and then weeded it along with the premask, you never want to do it again! With digital the labor is so much less and the size of the lines and fonts are only limited to the resolution of the printer. Registered trade marks, small type, and shadows are not an issue for digital.

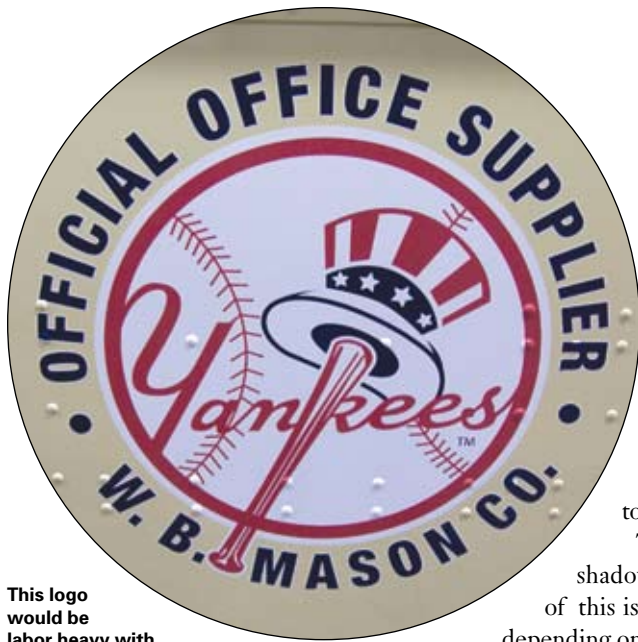
When you are talking about images and blends of color, digital is the only really good choice. You can print anything with digital—any color, any image, and just about any size. The limits are only your ability to create the file on the computer to make it what the client wants on the vehicle.

FLAT GRAPHICS

If you have done multiple color logos in cut vinyl requiring trapping and overlays, you know these are difficult to cut and install.

Trapping is where one color is laid over another color and the darker color is always laid over the lighter colors. Trapping is difficult for the installers

CONTINUED



This logo would be labor heavy with cut vinyl but digital is fast and easy with our Zund I-Cut system.

unless a clear premask is used. Depending on how you design the trap and shadows, some people cut the whole letter and then cut the inserts to lie on top of the letters to make the two colors.

Then they will lay the shadows next to the letters. All of this is very labor intensive and, depending on your labor rate, can be so much more expensive than digital.

COSTS VS. SAVINGS

So what does it all mean to the bottom line? Well instead of me telling you, let me give you a small example of a job we just did last week. We did a three-color (red, blue and white) logo for a tennis vehicle. The logo was 14" x 14" with a small 12" x 4" version on the fenders. Both sides and the hood needed a logo. The cut vinyl comes in 48" wide rolls.

This is the breakdown for the job comparing cut vinyl to digital:

As you can see by the numbers in the chart, the cost savings for just a few logos is over \$55 and this frees up 2 1/2 hours for just this one job. Now if you do this very small job once a week at the end of the year you would have saved over \$2,500 and 112 hours. If you did this small job every day the savings would be over \$12,500 and a time savings of over 600 hours per year. If the digital printer cost you \$30,000 with RIP and training you would pay for the system in just over two years. If you apply this same rule to signs, banners, and the works, the savings are HUGE.

I hope this helps you to better understand the difference between cut vinyl and digital print vinyl for vehicles and other applications.

Good luck, and be smart with your money, and I will see you on the show floor!



Product/Step	Cut Vinyl Way	Digital Way
Vinyl Needed	R=44" x 18" = \$10.00 (\$.75 per sq. ft.)	44" x 6" =54" \$13.00
Vinyl Needed	B=44" x 18" = \$10.00 (\$.75 per sq. ft.)	N/A
Vinyl Needed	W=44" x 18" = \$10.00 (\$.75 per sq. ft.)	N/A
Ink	N/A	\$4.80
Laminate	N/A	\$1.80 (Liquid) \$9.60 (Film)
Premask	\$.60	\$.60
Print/Cut Labor (\$15/hr)	\$30	\$7.50
Install Labor (\$20/hr)	\$20	\$5
Total Time	3 hours	30 minutes
Total Cost	\$80.60	\$25.20

Reprinted from Sign Business Magazine • May 2006
 ©2006 National Business Media, Inc. all rights reserved
 Please visit the [Sign Business Magazine](http://www.signbusinessmagazine.com) web site