



TECHNOLOGY REVIEW

By Chris and Kathi Morrison

Chris and Kathi Morrison own and operate The Image Specialists, a full-service graphics company based in Clements, CA. Chris is also a Microsoft-certified systems engineer.

Roland's VersaStudio BN-20

Sometimes a little inspiration will help expand your operation.



In these lean times, every shop is scrambling to maximize the bottom line. Ideally, you can build sales by offering a new service or process – especially if it's one your customers want – and competitors lack. Easily said, but not easily done. The short answer may be on Roland's truck. After all, they come up with some innovative solutions, especially for markets that reside under many people's noses, so we decided to review the VersaStudio BN-20, an innovative, quality-built, desktop printer/contour cutter that, get this, will image with Roland's metallic ink.

With a small investment (or lease agreement), and whether you're completely entrenched in the digital market or just boarding the digital-print boat, this 79.4-lb. printer will produce myriad profit-making images. It can short-run print decals, labels, posters, textiles and other applications up to 20 in. wide with standard, metallic or pearlescent colors.

The BN-20 can reside on a desk, tabletop or Roland's optional base. The printer stands 11.5 in. high, 39.2 in. wide and 23 in. deep. Plan to leave some working room around it, for such tasks as media changes and replacing ink cartridges. The power and environmental requirements – dedicated AC 100 to 240 V \pm 10%, 50/60 Hz – are minimal, so you shouldn't need major in-house modifications. The environmental operating range is 68 to 90°F, and the humidity range 35 to 80% (non-condensing). Thus, it should work fine in an office environment.

Roland recommends that you have a certified, dealer-level technician install the BN-20. If you wave off installation, expect to spend an hour or two performing the initial cleaning and calibration steps. We installed ours and, yes, encountered a few holdups an experienced tech would have quickly resolved, but otherwise, it was a snap.

(After we installed the ink cartridges, we performed a series of calibrations through the system's utility wizard. Simple. Finally, the wizard prompted a normal cleaning to get the ink flowing and, soon after, we ran our first – and successful – test print.)

Roland will soon announce a video that leads you through the self-install process.

Key Information

Roland DGA Corp.

15363 Barranca Pkwy.
Irvine, CA 92618-2216
(949) 727-2100
www.rolanddga.com

Company Profile: Roland DGA Corp., the U.S.-based marketing, distribution and sales arm of Roland DG Corp. of Hamamatsu, Japan, is a leader in the sign, graphic-arts, fine-art, vehicle-graphics, UV-cure ink, photography, engraving and 3-D modeling industries. Founded in 1981 and listed on the Tokyo Stock Exchange, Roland DG provides wide-format inkjet printers and printer/cutters, vinyl cutters, 3-D scanners and milling devices, and engravers and other personalization devices.

At a Glance: While the desktop-sized, 20-in.-wide, BN-20 isn't for producing large graphics or full vehicle wraps, it will create stunning graphic elements. See it as a stand-alone profit center for such smaller, exclusive work as finely imaged photographs, labels, decals and posters. Even better, perhaps, is its use for partial wraps and logos, plus delivery-truck and storefront window signs. Further, this tabletop machine allows you to use sexy, metallic spot colors to jazz up the design. Also, the printer incorporates Roland's automated, ink-circulation system that constantly circulates the ink and thereby ensures exceptional image quality and minimal maintenance. Overall, it offers a whole new world of possibilities, for around \$8,500.

Contact: Roland DGA sales
(800) 542-2307
sales@rolanddga.com

Technology

The five-color BN-20 applies Eco-SOL MAX ink at 1,440 dpi with variable-droplet, piezo-printhead technology. Its printhead system diminishes onboard static, which helps prevent printhead clogs.

At order time, you choose one of three ink configurations: dual-magenta CMMYK; metallic-silver CMYKmt, or, Roland's aqueous ink for indoor use.

The really cool metallic colors, obviously our favorite feature, match those produced by Roland's XC-540MT and the VersaCAMM VS series wide-format printer/cutters.

It's not your typical desktop inkjet printer. Its metal skins and a heavy-duty chassis make it an almost mini-me of the SOLJET XC-540. However, the BN-20 has numerous differences – no control panel, for example. Instead, the BN-20 printer utility, which works with all Windows flavors, provides error, ink, maintenance and other operations messages and access. Additionally, the BN-20 is a USB-connected device, which somewhat leashes it to the control workstation.



Fig. 1: Our first out-of-the-box print was bold, with solid colors and crisp text. We were impressed with the remarkable image quality.

Software

The BN-20 software package comprises the VersaWorks RIP and the R-Works vector-design package. R-Works allows you to import photos, create original layouts, add text and edit print-and-cut graphics. It also includes a vector-art library and a limited, metallic spot-color palette.

You send R-Works jobs directly to the printer via the Windows driver.

These software packages can be augmented with Roland-supported CorelDRAW or Adobe Illustrator software packages that comprise Roland's 512-metallic-color palette.

Operations

In cut operations, the BN-20 prints the image and then rolls it back into the printer for the cut process (you predetermine the contour line). And yes, you can laminate, because it also features Roland's Quadralign® four-point, optical-registration system for print-laminate-cut operations. The process? Remove and laminate the print, and then reload it for the cut action (it aligns to your pre-printed registration marks). It's the same feature as on the larger, more-expensive Roland printers.

In addition, the BN-20 uses a simplified, media-feed system that automatically aligns roll media. It also detects and adjusts the pinch wheels to the installed media width. The system lacks a media-advance control, so, instead, you manually back up the media by releasing the load lever; thus, the media advance isn't a problem.

Remember, it's a new concepts machine.

The 1,440-dpi image quality is tremendous. Also, speed isn't an issue if you're targeting short-run decals,



Fig. 2: We soon produced a heat-transfer decal to apply to T-shirts we designed for a pending event. BN-20 images can go on almost any shirt color. With it, a heat press, heat-transfer media and transfer mask, you're in the customized-garment business. The images will adhere to 100% cotton as well as poly and poly/cotton blends. Don't forget, you can include metallic colors and, of course, increase your price accordingly.

labels and T-shirt transfers. Further, you don't have to babysit the BN-20 – it happily works unattended. Also, its single print speed simplifies the printer's composition and operation.

We created our first test file in SAI's Flexi software and included a Roland CutContour callout (**Fig. 1**). Because our Flexi lacked BN-20 support, we created a workaround EPS test file, then opened our Roland's VersaWorks RIP software and pulled the test image into production. The result, right out of the chute, was spectacular.

Next, we accessed and created colors from Roland's BN-20 metallic-color palette and then dropped this file into our Flexi workaround to print, cut and, once done, view great results (**Fig. 2**). Later, we tested a CorelDRAW image with similar results.

A 20-in.-wide printer/cutter may not sound like an ideal shop addition; however, it's a way to offer additional products. High-margin, short-run labels and decals are the most obvious merchandise, but we picture a lot more.

Conclusion

With the BN-20, Roland has introduced a reasonably priced printer that, we think, will bring in more cash and customers to your shop. You might accomplish similar work on large print/cut machines, but do you have metallic colors? And, can they operate at the same time? Also, we weren't so hot on textile printing until we visited a sportswear show and were blown away with the garment-embellishment market.

If you're looking for a short-run printer that's capable of producing stunning metallic images for decals, labels, posters and textiles – and more – then consider the BN-20. ■