



SUBLIMATION QUICK STOP WITH MATT & KEVIN

By Matt Woodhouse & Kevin Lumberg

TOOLS & TIPS FOR High Speed Production

Sublimation usually starts out as a small-scale operation for most businesses. It can, however, turn into a large-scale operation. Producing items in the thousands, or even hundreds of thousands, is achievable, given the right tools and production techniques. We will examine the different tools, hardware and software that can increase production efficiency and reduce the costs associated with sublimation products.

SOFTWARE

RIP software is a tool for professional-series printers that can help with page layout, duplication, inserting variable items (names, photos, etc.) into a stock layout, reducing ink usage and giving greater color accuracy. RIP technically stands for Raster Image Processing. This term has been loosened in recent years. A good example is taking a CD & "Ripping" it to our computer via programs like iTunes, or Windows Media Player. So terminology is a bit less important than what the software can do.

Rips generally are set up as an after-step from our graphic design program. We will still design our art in programs like Corel-Draw or Adobe Illustrator and Photoshop, but we will not be printing directly from them. We will instead export our image out of our graphics program and import it into the rip software.

The rip program will allow you to set up your page layout and number of items on a page, and certain rips will allow a function called "Variable Data" (see the figure on the bottom of page 66). A good example for the use of the variable-data function is creating plaques for a sports team. Each individual player is going to receive a plaque with the team photo and name, plus their individual photo and name.

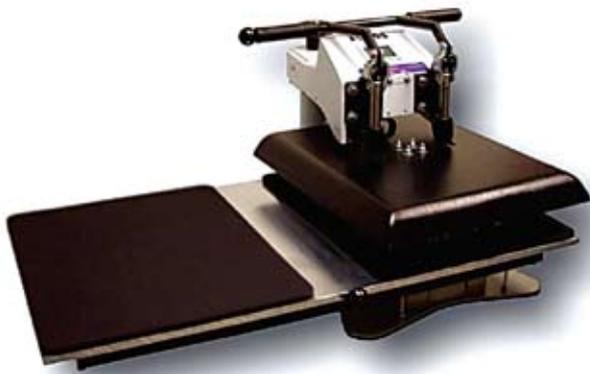
Instead of going through the painstaking process of changing each name and player photo, a template can be designed. This template will identify the fixed items (the background, team photo, and team name) and variable



items (player name and player photo). Going from a list of player names, plus a list of corresponding photos, the software will automatically duplicate and insert the variable data into its respective locations for each plaque. This procedure can save a considerable amount of time.

Printing with a rip can also be faster. Unlike when using a driver, where the job is being processed simultaneously, printing rips will segregate the two processes. The result is the computer is faster at sending the job to the printer, thus the printer will print faster.

Bosma Sign Solutions in Indianapolis employs individuals who are blind or visually impaired to manufacture sublimated products. They have jigs cut to accommodate a dozen cork-backed coasters.



A shuttle press has two base tables for the press and one heat platen.

HARDWARE

Printers: Printers designed for the professional-printing market are, as mentioned above, key to this process. The printers can be found from Epson, Roland, Mimaki, and Mutoh. These printers often print faster than their consumer-level cousins. They are also significantly more reliable. In fact, they can be so reliable we can often get away with them printing a large volume of transfers while we are gone. If the majority of our printing occurs at night, we can literally be making money while we sleep! Plus the printers will also allow us to get a reduction in imaging cost, as inks are purchased in larger volume, thus allowing for a better quantity discount.

Jigs: One of the keys to producing a large volume of products is jigs designed to minimize time taping individual items to transfers. Jigs commonly are made from either hardboard or MDF. They are custom-cut to a specific paper size, (8 1/2" x 11", 11" x 17", etc.) They also will have cutouts for several individual products to fit into one jig. With this concept, we can simply orient a piece of paper to the jig with several products contained in it. Thereby there is only one point of orientation and taping.

Bosma Sign Solutions, in Indianapolis, Indiana, is a company that employs individuals who are blind or visually impaired to

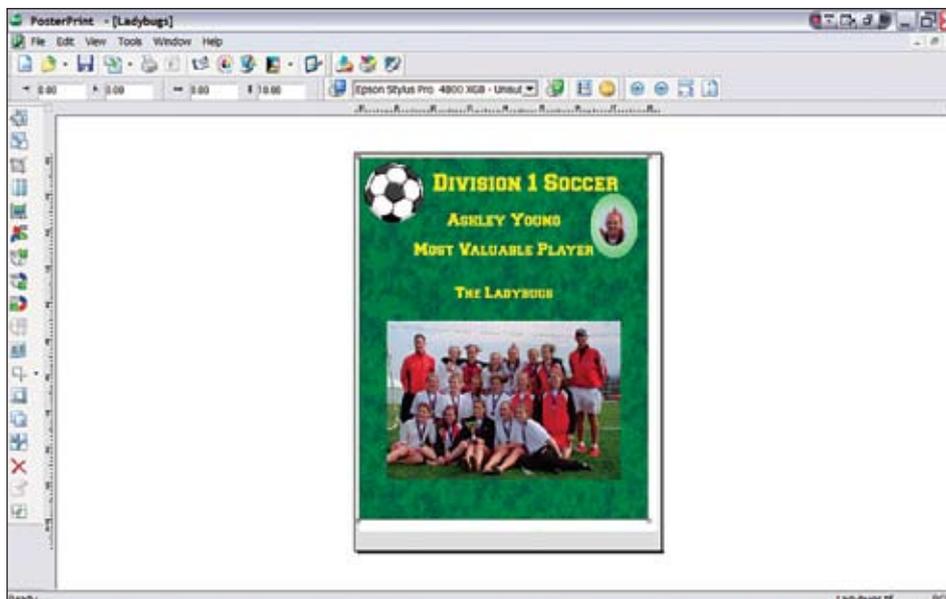
manufacture sublimated products. They have several accounts that require mass production of cork-backed coasters. They have jigs cut to accommodate a dozen coasters (see the figure on page 64). Even though their employees are not able to see to orient the images, they can simply take the jig and similarly sized transfer and orient via a tactile manner. With this production technique, they have been able to produce hundreds of thousands of coasters in a relatively short period of time.

Jigs can be made for producing the majority of sublimation items. Access to rotary and laser engravers will be helpful to creating a jig, or your distributor may be able to create one for you.

PRESSES

As so much of our workflow is determined by our heat press, certain presses or add-ons for presses can accelerate our production speed.

Shuttle presses: A shuttle press (see the figure at the top of this page) is such that there are two base tables for the press and one heat platen. Either the base tables will move, sliding back and forth under the heat platen, or in the reverse, the platen can slide to the base table locations. The concept is that while one run is being actively pressed, another can be staged simultaneously. This



The rip program will allow you to set up your page layout and number of items on a page, and certain rips will allow a function called "Variable Data".

can greatly increase workflow speed, as the press operator will never have idle time while a run is in the press. These presses are available from IDEK, GeoKnight and others.

Large Format Heat Presses: Heat presses that either can accommodate large items, or a large volume of small items can be key to the mass producer. With large press beds (up to 8' x 12'), large volumes of items can be produced in a single press cycle. Imagine being able to produce 40 plaques at once or a large ceramic tile mural in one or two press cycles. These presses are truly for the decorator who needs them. The price points on equipment like this can be upwards of \$50,000, but as with all investments, you strive to maximize your return on the investment.

WORK FLOW

The best equipment in the world can only get you so far. Being smart as to how that equipment is used and how the production run is staged can be the difference from slow and labor intensive to true mass production.

The work area for your press should have three stations: the prep area, the press itself and the cool-down station. The larger the press you are working with, the larger the other two areas should be to match.

The prep area should consist of a good size table in which to load a jig and position and tape transfers to the jigs. Some of the products we sublimate do have a protective masking on them. Heat can help soften the masking and make it easier to remove. This can be a good use for either an old heat press that is no longer being used, or even something as low tech as a few hair dryers mounted over the station.

The cooling area should either be a metal or stone (slate, granite, etc.) table, or metal shelving. The cool surfaces like metal or stone will help to quickly cool down the sublimated products, making the time they spend at this station minimal. Cooling fans can also help speed up this process.

While many businesses might not be ratcheting up production levels to the point where the large-format printers and presses are necessary, not only is it possible to produce in large volume, but many of the fundamental techniques can be applied to smaller equipment. The more efficiently sublimated products are produced, the larger the profit margins will be.

IN OUR NEXT QUICK STOP

Networking can be the lifeblood of any business, and with sublimation it is no different. In our next article, we will discuss ideas on how you can expand your sublimation network, and maximize the WOW that sublimation products bring to the table.

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