CTP Now More Viable For Smaller Printers

Recent improvements in cost-effective polyester plate technology and manufacturers' increased emphasis on smaller-format metal devices are enabling more and more smaller printers to make the move to CTP.

By Howard Fenton

While Computer-to-plate (CTP) technology made rapid and deep inroads into commercial printing in the late 1990s, for the past several years adoption slowed dramatically as the economy languished. In 2003, however, purchases of CTP systems by printers began to rebound.

In the overall metal CTP market, installed units were up 20% in the first quarter of 2003, compared with the same period the year before, according to a study by State Street Consultants. The study found this growth was much faster among small and medium printers (those with fewer than 50 employees), where metal CTP installations grew by a whopping 66%, compared with just 9% growth among larger printers. Driving the rush to CTP by smaller printers are:

- Improvements in polyester-plate technology.
- The growing availability of smaller-format metal devices, as manufacturers who had been focusing mainly on large, 8-up units give increased attention to these less expensive units.
- The widespread availability of more readily affordable refurbished or used imagesetters.

The State Street study notes that the importance of 2-up and 4-up format sizes has increased sharply. These smaller formats now represent almost 30% of all metal CTP units. Many 2-up and 4-up drum-based imagesetters can print out polyester plate material very well and even trim the material to the appropriate size.

In addition, improvements in the technology of polyester plates have made this less-expensive alternative to metal plates more attractive. Polyester plates had earned a poor reputation due to their tendency to "stretch" while under pressure on the press and therefore not hold registration well. The result was often unacceptable variations in color and fit.

Today, polyester plates are available in a thicker configuration—generally 0.012". This increased thickness helps minimize their tendency to stretch and enables them to work quite well for a number of applications.

A study on "The Market Potential for Polyester Printing Plates: 2001-2005" by the Graphic Arts Mar-▶

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12 Steps to CTP Implementation

Printers seeking to implement computer-to-plate (CTP) may find some helpful guidance in this process, designed by Howard Fenton, NAPL senior digital technologies consultant, and other experts:

1. Research CTP systems on the market through trade association and industry conferences; press coverage; vendor information.

2. Evaluate how long the technology you're considering will fill your needs. Develop a back-up plan for those times when equipment goes "down."

3. Perform a workflow analysis. Eliminate bottlenecks that won't be resolved by CTP (in estimating, order entry, customer service rep function, preflighting, etc.).

4. Implement quality control, process control, and color management. Print targets, measure results and begin building ICC profiles for proofers.

5. Put preflight tools in place and implement efficient preflight procedures for application and PDF files.

6. Master PostScript and/or PDF workflow steps (color correction, trapping, imposition, file repair, etc.).

7. Install digital proofers; use them to test imposition and trapping, and build and test ICC profiles. Create transition strategy to digital proofs.

8. Review network, filer server, print queue, open prepress interface (OPI), and archiving equipment/strategies and procedures.

9. Review and change infrastructure, including any required physical plant changes (HVAC, electrical, etc.).

10. Perform final price and contract negotiations with vendors (add performance criteria if applicable).

11. Buy and install platesetter. Test targets and establish process control tolerances and procedures.

12. Analyze the effectiveness of your digital workflow. Identify work-around procedures created as short-term fixes and create longer-term solutions.

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keting Information Service (GAMIS) concluded that, depending on the condition of the press and the quality requirements for a specific job, polyester plates are suitable for run lengths of up to 25,000 impressions (some sources say polyester should be used only for runs under 20,000) and for a wide range of work, including print products with halftones, screen tints, and heavy coverage.

When considering a move to CTP using polyester plates, it's im-

portant to keep in mind that polyester plates are easier to damage than metal plates and, therefore, require more careful handling in the pressroom. Effective handling procedures should be put in place to minimize problems.

Another key concern is that, to accommodate the increased thickness of today's polyester plates, the laser on the imagesetter must be adjusted. Because not all devices have the capability of refocusing the laser based on the thicker material, the potential need for, and cost of, a new device must be part of the decision-making process.

A roadmap to determining whether polyester plates are the right choice for your pressroom was provided by Dean Meyer, Output Systems product manager for Heidelberg, who recommends that printers:

- Look at the run lengths in their shops. Polyester works best in short runs under 20,000 impressions.
- Determine the maximum line screen. If it's below 175 lines, polyester plates may be appropriate.
- Consider the new, dedicated machines for polyester plates that will notch and trim to size.
- Consider dedicating the recorder (image setter), to polyester, with an inline processor and keeping an offline film processor for the occasional piece of film that may be required. (Polyester done offline may lead to problems from excessive curl, scratching, and unnecessary waste between jobs, Meyer maintains.)
- Realize that it is not practical to switch back and forth between media unless you invest in a six-bath, combination processor that lets you run poly or film in one inline processor. However, these are readily available only in 4-up and 8-up recorders.

The main advice for smaller printers considering a move to CTP is to take the time to investigate all the options. Don't feel rushed. Despite what you may have heard, if you haven't yet made the transition to

CTP, you're not alone. A large number of companies are still making their plates conventionally.

CTP can yield substantial benefits to printers in terms of increased productivity and quality, but the key is finding the system that's right for your operation. ∎

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Maximizing the Benefits of CTP

Most companies that invest in computer-to-plate (CTP) technology do so to increase productivity and job quality, both of which are realistic goals. After CTP implementation, plate production generally increases from 15% to 40% per shift. Quality increases as well, measured both by a loss in dot gain and by a reduction in the percentage of plate remakes.

These potential benefits have much less chance of being realized if there are problems in other areas of your operation that are not addressed effectively. These include:

- Bottlenecks in the early workflow (Sales, Customer Service, job planning, order entry, etc.), which will decrease productivity.

- Poor quality control before or after platemaking (in preflight, the pressroom process control area, or in press maintenance), which can negate the quality gains made by CTP.

To maximize the return on your CTP investment, make an effort to improve processes throughout your organization.

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