

# Understanding the real costs of CTP

By John Zarwan

The move to CTP has increased printers' productivity and efficiency by simplifying the print production process and streamlining workflow. Despite the cost savings achieved by moving from film-based platemaking to CTP, there still are important costs incurred in getting the plate from the platesetter to the press. Most printers accept these as unavoidable costs of doing business, and therefore do not track these costs very carefully. As the pressure on printers to increase efficiency and speed continues to grow, understanding these costs and their implications becomes increasingly important. It is absolutely critical for printers to identify and evaluate *all* their costs and processes, and to continue to make improvements.

Many, if not most, printers tend to underestimate the total cost of chemistry, processing and maintenance. The cost of processing is not trivial. This is a real cost center; whether or not you choose to track these costs, you must be aware of them. These costs include:

- The cost of the processor, including floorspace.
- Cost of chemistry.
- Cost of maintaining the processor.
- Inventory costs.
- Baking.
- Waste disposal and environmental compliance.

Printers who keep good records—or whose suppliers provide reporting relative to the value of the chemistry purchased—report spending considerably more than those who only estimate chemistry use.

Further, each step in the production process represents an opportunity for error. It is critical to understand the potential sources of mistakes and their associated costs. In doing so, it is necessary to analyze the cost of each piece of the operation. In addition to the direct and indirect costs of material and labor associated with plate processing, extra steps have the potential to introduce variation in process control, stability and consistency.

One of the principal attractions, therefore, of chemistry-free or processless plates is the streamlining of workflow and elimination of variables associated with plate development and processor maintenance. Process-free eliminates almost all of the nonplate costs. The importance of eliminating chemistry and processing was confirmed with the introduction of a number of processless plates at Drupa 2004.

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The full report, "CTP Plate Making: Understanding the Real Costs," can be downloaded at no charge from [www.johnzarwan.com](http://www.johnzarwan.com).

# Violet processless CTP

By John Zarwan

With computer-to-plate (CTP) so well established, it's easy to forget its advantages over conventional plate making: labor reduction; elimination of film and chemistry; improved print quality and consistency; pressroom savings and faster makereadies; and fewer production steps.

Processless plates extend those advantages. Most obviously, they eliminate the cost of chemistry, including inventory and storage costs, as well as the associated labor. Disposal costs are eliminated or reduced, with environmental benefits. Perhaps most important is the continued streamlining of print production.

For the first decade of direct-to-plate, only Presstek offered processless plates. But in the last two years, Agfa, Fuji, Kodak and Citiplate (privately labeled) have introduced or announced their own, and momentum and usage continues to build.

## Thermal's toe-hold

To date, all processless plates require thermal imaging, although Fuji and Citiplate have announced development of violet processless plates. Until five years ago, it appeared thermal had "won" over visible light. But since the introduction of CTP with violet lasers, visible light solutions have regained momentum. Thermal still dominates in North America; violet is relatively more popular overseas, particularly in newspaper applications. In the chemically developed digital plate world, both technologies work. Each is attractive to printers in various situations.

## Violet's pros and cons

The main arguments in favor of violet center around faster imaging, lower machine costs and lower cost of ownership.

While it is difficult to discuss a technology that is still in development and a long way from commercialization, it is not clear that the arguments in favor of violet imaging will carry over into processless plates.

**Cost** | Current violet lasers generally cost less than lasers used for thermal. One reason is their lower power. Another reason commonly given is that the technology is used in consumer applications, thus benefitting from a much larger market. As 30mW and 60mW lasers became available, they could image photopolymer plates.

By all accounts, however, substantially higher powered lasers will be required to image processless plates. These lasers

are becoming available, but as they become more powerful, they also become more expensive and are less likely to be used in "mass market" applications. It's very likely that much of violet's cost advantage will disappear. But, note that most violet platesetters use "internal" drum technology while most thermal platesetters' are "external." Internal drum machines tend to be simpler, with fewer moving parts, and therefore tend to be less expensive to build and repair.

**Handling** | Violet plates are not daylight safe. Many of today's chemically developed violet plates need to be handled in yellow safelight. This is likely to be the case for any future violet chemistry-free system. After imaging, chemical development addresses this. Processless violet plates probably will need some type of wash or clean-out and gumming to make them daylight safe. While this adds a step compared to many thermal processless plates, it does have the benefit of allowing the plates to be proofread. Of course, it is entirely possible that a daylight-safe violet plate eventually will be introduced.

## A place for processless

Processless plates are not for everyone, particularly large, high-volume printers.

Many installations of processless plates have gone to first-time CTP buyers, particularly in the four-page market. They like not having a processor and certainly appreciate the space, labor and chemistry savings. As it will be some time before violet processless plates are available, it is not yet clear whether the system and plate cost, or the additional processing step, would be seen as relative disadvantages vs. thermal processless plates.

The advantages of chemistry-free platemaking also have convinced many to switch plates as they upgrade their equipment. They might be interested in violet processless, especially those who already have a violet system. But because of the increased laser power, any violet processless plate probably will not be a "drop in" product; it will not work with an existing unit. So the "emotional" tie to a violet laser would have to be pretty strong unless the violet processless plate was demonstrably superior to other available technology.

Of course, until we actually see the plate and its characteristics, and find out more about pricing of both the plate and the imager, it is difficult to determine whether that will be the case.