

DRUPA 2004 : CTP is changing direction and no one is paying attention

Or: The rise and fall of the thermal empire

Of course CTP was not the highlight of this Drupa. No one expected it to be. But the change in the strategic direction of this technology does deserve a spot on the list of highlights. The weird part is, no one has noticed it yet. So, with the noise of the crowds fading and the last wafts of marketing fog dissipating from the Drupa stands, I think the time has come for a few words about the change. Naturally, this is just my personal opinion, and it could be off the mark a bit, but in any case I hope it will stir up some discussion.

To put it in a nutshell, you could describe the history of CTP, and in particular the history of CTP at Drupa, as "The rise and fall of the thermal empire." To avoid completely upsetting my friends and clients in the thermal camp, I must immediately add that this is just a metaphor. But there is something substantial behind it, and that something is named Fuji.

Although Fuji explained, in writing, prior to Drupa that the company saw the best prospects for CTP in the area of violet technology, hardly anyone seems to have remarked on this. Perhaps most people haven't even heard about it. In any case, I have heard essentially no reaction to it, even though this announcement is actually the most remarkable one that anyone has made since last Drupa.

Do you know why Fuji is being comparatively restrained about introducing processless thermal plates? It is the logical consequence of the company's own statements. Why would they bring out a product that, from their own point of view, had no prospects? Naturally, they are working on such a plate, to make sure they don't fall behind the competition, but it is beginning to look like it is actually just the basis for introducing a processless violet plate. Fuji could easily bring a half-finished product to market, as Agfa and KPG have done, but they just don't want to.

Watch for processless violet

I wouldn't be surprised if we get an announcement from Japan in 2005 (or 2006 at the latest) that the time of the processless violet plate has arrived. It only makes sense, if you look at how the power of violet diodes has been increasing. For silver-based plates, no additional power is required. But in four years will we still be using poisonous and expensive-to-process silver plates?

In 2000, realistically speaking, we had 5mW of laser power available. In 2002, it was up to 30mW; and at Drupa 2004, 60mW lasers were everywhere, and Krause was already showing 100mW (and others had 100mW in the works). A source who knows the laser scene tells me that it won't be long until we have 150 mW diodes, perhaps even 200mW or more.

What do we need 150mW diodes for? We don't need them at all, since 60mW is plenty to make any commercial printer happy (and diodes just aren't developed for the handful of newspaper plants that want to expose 300 plates per hour on a single machine). So why do we need 150mW diodes? Right: to image processless violet plates. Just as with thermal technology, processless requires the most energy.

I'm not claiming that 150mW diodes will be developed because of the need to image processless violet plates. Just the reverse: because 150mW diodes will be developed (to be used for reading and writing multi-session DVDs, for example), processless violet plates will be possible in the near future.

Indeed, I don't want to create the misconception that the future is entirely processless and that violet only has a future via processless technology. Quite the contrary; I was somewhat disappointed with this Drupa in terms of what I saw and heard about processless technology.

The only vendor that really had materials that you could call to some extent "processless" was Presstek. However, Presstek was not able to explain to me how it, as a "mini-vendor," could ever produce five different process-free or processless plates economically enough so that the majority of small printers could afford to use them on their presses. At Drupa, I didn't see any processless plates that were economical in volumes above 2000-3000 square meters per year. But if you use so few plates in a year, why would you buy a CTP system for metal plates in the first place? No one could give me a plausible explanation, probably because there really isn't one (not one based on ROI, at least).

Does 2-up or 4-up thermal have a future?

So, apart from the apparently unbending bastions of Creo and Presstek, no one who is active in the 2-up or 4-up market seems to believe in a thermal future for these installations. But 2-up and 4-up are the future of CTP, since these are the formats of the majority of presses.

The majority of smaller vendors (like Mantragraphics, Lithotech, Highwater, Escher-Grad, and ECRM) just don't believe in a thermal future for pure offset CTP. And ECRM had an extraordinarily successful Drupa and may be on its way to its best year since Drupa 2000. I don't expect much from Creo's effort, in association with KBA, to sell a mini-Lotem as essentially a fifth printing unit with each press. It worked very well for Heidelberg a few years ago, but times have changed a bit since then. It is really a shame when a company like Creo, that owes its ascendancy to its timely recognition (or even invention) of the real trends of the day (as the NGP, which Creo brought to life, so dramatically illustrates) starts to demonstrate the exact opposite in its core business. Where were Creo's great CTP innovations at this Drupa?

Earlier, I said that Fuji was the substance behind the change in trends, but that is not entirely true. In the flickering fog of Drupa, KPG emerged as the third-largest violet vendor of the future. No one said so officially, but even an empire like KPG looks foolish if, over the long term, it simply ignores 50 or 60% of a market. And the newspaper market is currently 80% violet, with a violet market leader (Agfa), and that is why KPG will introduce their violet plate at IFRA this year.

Some at KPG will have a hard time understanding this, and Creo won't understand it at all, but history has shown us on many occasions that people often fail to understand developments that are taking place right before their eyes. The problem in this case is that you end up not being the one driving the change. Not everyone can afford to be in that position.

The CTP market in 2008

Perhaps the best way to explain the shift in CTP trends is to take a look at how CTP will appear in the year 2008. By then, we'll be seeing a lot of CTP systems that use inkjet technology to image a plate. This may not be sufficient for all applications, but then neither are any of today's technologies. At the current Drupa, there were three inkjet-CTP systems in all: from Jetplate, from Glunz & Jensen, and (unnoticed by many) from Technova. Technova, the Indian vendor of cost-effective laser-printer plates, is predestined to be the company that finally conquers the small-offset market with affordable CTP technology. At Drupa 2004, the company showed an interesting first step in that direction.

Inkjet technology still needs some improvement to reach the level of classical commercial printing, but in comparison with 2000, the improvement in image quality was huge.

The use of conventional plates with digital imaging technology will also increase noticeably after this Drupa, at least once the Espresso device that Esko-Graphics showed is released to the market. In contrast to BasysPrint, Esko-Graphics is not making the price difference between conventional and CTP plates its primary focus. But this strategy by the Danish-Belgian firm removes precisely the one development that could get BasysPrint into trouble: the decreasing price difference between the plate technologies.

This is not to say that cost differences have already disappeared; quite the contrary. We find that CTP plates cost 30% to 80% more than conventional ones, depending on the market. But it is also indisputable that this price difference has been cut roughly in half since 1997, so you wouldn't want to argue that the difference will persist for another seven years. This is not a criticism of BasysPrint, which has done a good job of continuing to develop their technology. BasysPrint now has machines producing more than 120 plates per hour in the newspaper market. But the trends indicate that even BasysPrint, which has been persistently producing CTCP (computer to conventional plate) machines for eight years, must think about new directions if it doesn't want to let opportunity pass it by.

And you can be sure that the coming competition with Esko-Graphics will fire up the CTCP market among both the vendors and their customers—that's the beauty of competition. What also went unnoticed by most was that Esko-Graphics, with the Espresso, wants to make its mark in quite a different way. Imagine for a moment the filigreed Espresso next to a fully-automatic Platedriver and you'll see what I mean. The Danes finally caught on, and instead of huge, exquisite machines they have made an "everyman's platesetter." (I am tempted to call it a "trendsetter," but that would probably be the wrong expression to use here.) This complete and highly intriguing about-face in machine design is one of the first really visible signs that the new Esko-Graphics CEO, Kim Graven-Nielsen, and his team have taken charge; and it is a good illustration of the good things that can happen when someone from outside the graphic arts industry influences the direction of a graphics firm.

Thus, a quick look at the past and the present reveals the future, and here is how it looks: In 2008, the great majority of all CTP systems that are offered, sold, and installed will be non-thermal. Will the whole CTP market then be violet?

No, surely not. There will be small islands of stubborn thermal diehards who will resist the stampede, and the stampede will certainly not be entirely violet. What we will actually see in 2008 is violet systems co-existing with CTCP systems from BasysPrint, Esko-Graphics, and at least two or three more vendors, along with whatever varieties of CTP that inkjet technology is capable of by then.

Thermal will surely not vanish but will be more focused on market niches, which requires quite a different approach to the market, as the clever flexo machines from Lüscher illustrate. They are clever not only because the internal-drum design greatly simplifies the handling of flexo mats, but also because many users in the label and packaging industry now have a single machine with which they can produce both flexo and offset plates.

I have thought long and hard about whether I am mistaken in this prediction. Perhaps Presstek and A.B. Dick are correct in the direction they have taken with their plates and systems. The announcement, the pricing, and what I was able to see at Drupa, were all impressive to a degree. But on the other hand, I would like to see this technology proved in practice in the field, and that won't happen until at least the end of the year.

So we will still see thermal systems at Drupa 2008, but in contrast with 1997 they will no longer be the definitive technology for CTP and its continuing development. Thermal will continue to find strong niches in VLF and certain 4-up and 8-up markets.

And that is the great shift in trends that went nearly (but not completely) unnoticed at this Drupa.

Written during DRUPA 2004, in May that year; revised with the gentle help of many friends and colleagues in the industry.

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