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# Spindrift

...Surviving The Graphic Arts Industry Since April 2003

News Focus • Opinion • Reviews  
Techno-Babble • Attitude

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27th April, 2004

**Excitation** Adj. *exciting*, stimulating, intoxicating, heady, exhilarating; provocative, teasing, piquant, tantalising; spicy, appetising; cliff-hanging, hair-raising, spine-chilling; thrilling, agitating; moving, affecting, inspiring; sensational, dramatic, melodramatic, mind-boggling; gripping.

From Roget's Thesaurus of English Words & Phrases

## Dear Reader,

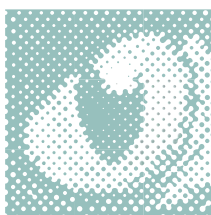
Enough with the Drupa count-down, let's go already! We confess to being excited about yet again being in the midst of, not only the latest publishing and printing technology, but also all our fellow enthusiasts from around the globe. As the observant reader will have noted, we have spent this entire spring digesting, and regurgitating to you, many of the wondrous products to be shown at Drupa, and a few more are included in this issue's News Focus. And then there are the ones we have only heard rumours about. We've heard Heidelberg is going to introduce an 8-up thermal CTP device, incorporating their own laser heads, and allegedly to be produced without involvement from any OEM-partner, although we're not sure where, since the Kiel outfit has been closed down. Screen is introducing a 60 mW version of the Platerite Micra B3 (2-up) semi-automatic violet imaging device. The next issue of Spindrift will be produced and published during the course of the show. We would love to talk to any readers, so please don't be shy. If you bump into us, let us know what you think of the newsletter!

Everywhere we turn, trade publications are complaining about how airlines are putting up fares to get into fair Düsseldorf (pun intended). At least in the UK, this evokes little sympathy from the cost conscious Spinny crew. We are flying Ryanair from London Stanstead to Niederrhein Düsseldorf. Two weeks before the show the price for a single ticket is still £1.99. Of course we'll have to bring our own hors d'oeuvres...

See you in Düsseldorf!

The Spindrift crew,

**Laurel, Cecilia, Paul and Todd**



## In This Issue

### ***Digital Printing is Happening Now!***

Yes indeed – this to-the-point phrase is the Drupa slogan of one of the vendors of digital colour presses (for more catchy slogans, see Spindocs). And it is true. Writes Cecilia Campbell: "Over the past ten years the digital press market has gone from being less than marginal to becoming a mature and expanding field for some of the biggest suppliers in the graphic arts industry. More importantly, printers are taking real advantage of this technology and the associated business opportunities." We go through the various technologies and players, and let the vendors say a few words...

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### ***Digital Printing is Happening Here!***

According to Ragnar Andersson, MD of Digital Printing Network in Sweden, the most important difference between running an offset operation and a digital print operation, is the new business opportunities the latter presents. Dpn has created a number of services whereby their customers can keep their printed products stored digitally with Dpn and have them printed only as and when they need them. This saves the customers costs for physical storage and they avoid printing more than they need. Says Ragnar: "It is about creating new chargeable services for our customers, so that we don't have to compete on price per print the way we used to. This is the key to digital printing success." Find out more...

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## Regular Columns

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## News Focus

### Enfocus

Instant PDF 3.0, due for launch at Drupa, is a completely revised product. Enfocus has made a major change with this version. Instant PDF 3.0 is a standalone program built on Enfocus' own PDF libraries, rather than Adobe's. This means that the software is a single application that does not need Acrobat to run. Instant PDF 3.0 has all the sophisticated tools for creating clean PDFs present in the existing version, and runs under both OSX, for direct PDF creation, and Windows. It can also be integrated with Xpress and Indesign for creating PDFs using the Export options in these applications.

Enfocus will also show PDF Queue, a tool that allows document receivers to specify how PDFs should be created, their configuration and preflight options, auto correction options and destinations for completed files. This queue is unique to its users, and any optional changes that might be possible are specified by the queue creator, so that changes to options can be selectively locked depending on who is using the queue. PDF Queue can be used to manage collections of material for building single archive files including the queue information plus any associated files such as the job options i.e. job ticket, or PDF profile. With PDF Queue the file receiver can define the workflow parameters for a PDF file, locking down critical settings according to

who is using the file and where it is in the workflow. PDF Queues can also be made available to subscribers via the Enfocus Certified PDF.net server.

Enfocus has also extended its application support with the PDF Workflow Suite. This has everything needed for setting up a Certified PDF.Net workflow. For document creators there are tools for importing PDF Queues from say a printer into Instant PDF, plus utilities for subscribing to a specification at the Certified PDF.Net website. Instant PDF 3.0 automatically synchronises with CPDF.Net to update individual queues. There are also new error reporting tools with links from the message in the preflight errors report to a Help document that explains the problem and how it can be fixed.

At Drupa Enfocus is demonstrating how JDF compliant workflows work with its Certified PDF.Net technology. Enfocus can embed job ticket information in a PDF so that the job ticket can be checked, effectively providing an audit of the job ticket, in rather the same way as preflighting is an audit of a PDF. There will be a range of job ticket definition fields, some of which are mandatory, and some optional. These job ticket definitions will be stored in the Enfocus PDF Queue so a future version of PDF Queue will support the uploading of job ticket data to a workflow management server.

The job tickets are written in XMP and stored in the PDF file. The job ticket is thus protected and Certified PDF can then check the XML data as well as the PDF data structures. This technology will be available to all Enfocus partners who will be able to extract the XML data from the PDF for use in their workflow system. There is also extraction support for XSLT, HTML and of course JDF.

### Spindrift

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### AdsML 2.0 under way

The standard for adding metadata to classified ads, the XML compatible format AdsML, is about to reach its second generation, a year after its introduction. In the new version there will be four categories for classified ads to be predefined. Those are housing, recruitment, transportation and travel. Although drafted for classified ads at this point, these vocabularies ultimately will apply to any advertisement, regardless of ad type or designated media. The vocabularies will build on and expand the information contained in the North American standard, CRESTTM 2.0.

The mission of the AdsML Consortium is to develop an open standard that will unify and extend existing advertising standards and automate advertising business processes – across all types of media, for all stages of the lifecycle of an advertisement, across all segments of the advertising industry, worldwide. It is supported by Ifra and the Newspaper Association of America (NAA). ▶

### ▼ **Esko-Graphics introduce UV-CTP Espresso**

Esko-Graphics has (finally) announced the launch of Espresso, a 4-up computer-to-UV-plate system. The Espresso is capable of imaging conventional presensitised plates with UV light. A prototype for imaging UV-plates was demonstrated at Drupa 2000, but this time it will be a fully operational machine that will be shown. Details of pricing and availability will be provided at the show.

The light source in Espresso is a conventional video projection lamp, and the imaging head is very similar to that of a video projector. Imaging is made at the fixed resolution of 2400 dpi at a speed of up to 13 plates per hour in normal light conditions. Using high sensitivity UV plates in proper safe-light conditions increases the speed to around 20 plates per hour. Using negative plates may increase imaging speed even further since much of the imaging area can then be skipped.

The Espresso is operated much like a contact frame. The plate has to be positioned to three register pins with electronic sensing. Vacuum is applied automatically when the plate is in contact with all the register pins, and the exposure starts when the lid is closed.

It seems as if this is quite a different machine than the one previously shown at Drupa 2000 and IpeX 2002. Normally it's said that a UV plate needs to be exposed with a very powerful laser, but here Esko-Graphics is exposing the plate using a conventional video projection lamp. This is a "must see" at Drupa. Of course whether it will be a commercial success depends very much on the price and when it can be brought to market. There are already UV solutions on the market, Basysprint and Alfaquest being the most well known manufacturers. Despite all the pros of using conventional UV plates instead of the more expensive digital plates, there isn't exactly a huge rush for these systems. Escher-Grad also showed a prototype at the latest IpeX, but that seems to have come to nothing. Since the prices of CTP plates are steadily falling, Esko-Graphics has a (small?) window of opportunity to make sure that the sales of Espresso take off.

### **Axel Springer – A little too late**

The Düsseldorf region is going to be home to German publishing giant Axel Springer's next newspaper launch – or trial, to be more precise. On May 24th, the company will print the first issue of a new 32-page tabloid called Welt Kompakt (you got it: Compact World). The newspaper will be published Monday–Friday during an eight week trial run, and will contain news from two other Axel Springer papers, Die Welt and Berliner Morgenpost, according to the company. Of course it comes too late for those in Düsseldorf for Drupa, but you can't have everything.

### **Preflighting take-offs**

Callas has introduced MadeToPrint (sic), a plug-in for extending Indesign CS presets. The technology is designed to improve output management through improved controls over output settings, adding a clever file management dimension to preflighting functions.

Markzware has also been busy and has developed XMLazarus, a tool for converting files into XML. This looks like a very smart piece of software particularly for legacy material. XMLazarus can convert old files into XML files that can be used in a variety of workflows. Markzware has also tested a bidirectional version of the software through which files can be turned into either XML or Indesign CS documents.

Flightcheck Online, Markzware's software for automated server based preflight management, is evolving into a managed ASP (Application Service Provider) service and is to be available for the German, Austrian, Swiss and French markets. Markzware has also added new features to Flightcheck Professional. The software will include all the checks required for PDF preflighting following the Ghent PDF workgroup guidelines.

Onevision is strengthening its position in workflow management with the introduction of JDFnet. This technology connects Onevision's Asura, Solvero, Speedflow, and Sicuriq preflighting technologies with other systems such as MIS and their various related systems. JDFnet is a browser based system for automating production over the web. Onevision uses its own PDF library and new functionality will be added to its preflight and workflow modules for processing native PDF 1.5 files without restriction.

### **Wamnet launches JDF workflow solution**

Wamnet, a division of Savvis Communications, will show Wamnet Direct JDF at Drupa. With the help of Wamnet Direct JDF, users can automate the distribution of digital files since the system supports JDF based job tickets. If the customer's destination device is JDF enabled, the content will be placed in an accessible location and notification will automatically be sent to the device that the content has arrived. This can then be retrieved and routed in accordance with the specified JDF instructions. If the destination is not JDF enabled the content may be retrieved in a manner consistent with the customer's current destination workflow.

Wamnet hopes that this will enable the Wamnet communications system to be the preferred hub for global digital workflows.



## Acrobites

*(Something to get your teeth into)*

### DPT

PPML 2.0 Digital Print Ticket allows a PPML (Personalised Print Mark-up Language) job to dynamically set parameters on the fly from the PPML file, defining certain file information so that the information could be used in a JDF workflow. Version 1 of DPT was a precursor to many of the ideas for digital printing interoperability included in JDF. PODI (Print On Demand Initiative) is now working on a new version of the PPML Digital Print Ticket, due for completion later this year. This will be based directly on JDF syntax to restrict the type of JDF workflows a digital output device should support, without constricting a device's processing options in any way. A digital press or printer will be able to support JDF workflows that incorporate PPML or not, as the user prefers. The idea is that all types of files move from origination to final output more efficiently, with JDF facilitating smooth processing of personalised print data. It will be especially relevant for complex print jobs, where content is sourced from a number of files residing on different data systems.

### TCOP

This is a favourite acronym with, among others, digital press suppliers. It means Total Cost of Production. Except sometimes it means Total Cost of Print. It depends on who you are talking to. (There are other permutations, for example TCO, for total cost of ownership.) However, the important thing is not what the "P" stands for, but rather what this jargonistic acronym actually means. In the example of a digital press supplier, you may be told that Press X has the lowest TCOP on the market. This tells you nothing unless you know what's included in these costs; labour, usage charges, consumables, capital, electricity, space and so on. Ask anyone who throws this acronym at you to specify exactly what he or she is talking about. You'll then have a useful yardstick for comparing production systems.

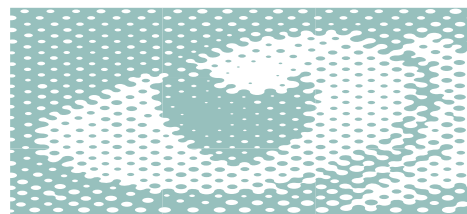
## Spindocs

*(Where the spinner gets spun!)*

In time for the marketing showdown in Düsseldorf, we've decided to run a competition. We've gathered the Drupa slogans (timeless classics most of them) of 17 top exhibitors. It's your job to connect the right vendor with the right slogan. To spice it up we've entered the Spindrift slogan as well, however there are no prizes (literally) for getting that particular one right. Please e-mail us your answers by May 31 at [cc@digitaldots.org](mailto:cc@digitaldots.org). We'll draw a winner who'll get a year's subscription to this publication for free. [Oh really? – Pub.]

There will be an extra mention for anyone who manages to find a slogan at the show which we've missed and which is even more pompous/nonsensical/OTT than the ones below!

KBA	We are print
Heidelberg	See, touch, evaluate
Presstek	People & Print: Driving Advances –Together
Spindrift	Created with Passion. Made for Success.
Océ	A Smarter Way to Print
Ferag	Our passion is your success
Nexpress	Imaging advantage with...
Creo	Ideas Creating Opportunities
KPG	Today... Tomorrow... The Future
PrintCity	Freedom of Impression
Agfa	More Than a Press. Powering Success.
MAN Roland	Digital Printing for Professionals
QuadTech	Connection of Competence
Xerox	The New Business of Printing
Fujifilm	Digital Printing is Happening Now!
Goss	Stay ahead. With...
Komori	Get wet with...
HP	Tomorrow Never Dies



# Letter From...Elsewhere

## Another Point of View

By John W. Seybold (1916–2004)

I beg you, do not rage against the dying of the light,  
Nor grope; nor curse, nor fantasize, nor fear the black of night,  
But close your eyes and wait awhile, until the way is clear:  
Your passage will be friendly and you will sense no fear,  
For you will be encircled by a radiance of peace.  
The tension will have disappeared. A feeling of release  
Will bring a new identity, and beauty will surround  
Your dwelling place, while choruses and symphonies will sound,  
And somehow you will recognize a dear, familiar ground  
Where you belong. Your heart will know your dwelling  
has been found.  
And you will live in peace there, and it will be your home—  
And, if you wish, nine bean rows—perhaps a honeycomb—  
But most of all, no worries! And friends will seek you out  
And beg to know the secret, how faith replaced your doubt,  
Which faith? They will demand to know, as if it could be bought,  
Or written of, or bartered, or dithyrambs be taught,  
And you will yearn to tell them or point them to the way—  
Alas, they will discover there is nothing you can say!  
Each one must search within himself and if he should despair,  
If it be deep enough, ah then, he will be halfway there!



John W. Seybold

## Say What?

*(Iffy Writing Award Presented in the Ether for Obfuscation, Confusion, Misinformation or All Out Pretentiousness)*

*We confess that the following does not quite qualify under the above banner, but we just had to include it anyway. We found the tirade on [www.pravda.ru](http://www.pravda.ru). This is how you build a geopolitical argument on a faulty Xerox printer:*

**“Low-Quality Xerox Production Inundates Russia**

**PRAVDA.Ru refuses from services of the Xerox company**

The word “Xerox” used to be a synonym of the word “freedom” during the Soviet period of the Russian history. This rule worked for a lot of people, but not for everyone. Freedom-loving Soviet citizens managed to copy Vladimir Nabokov’s, Alexander Solzhenitsin’s books on machines of the American company Xerox, that were placed in state institutions. Xerox machines were used during the perestroika period as well. The totalitarian regime does not exist anymore, and it turned out that a Xerox machine was just a machine that was not unique at all. In addition to that, its quality was not as high as its producer advertised. Such little things often dissipate myths, including myths about freedom, democracy and the technological superiority of the West. Nevertheless, Russian people still believe that printers and copy machines of the company Xerox are incredible pieces of the modern technology. ▶

PRAVDA.Ru has not managed to avoid such a stereotype either. The company once purchased Xerox XE82, series number 2881549223. The machine worked fine for a certain period of time, until it came out of order one day. There was a guarantee for the machine, specialists categorized the repairs as E2 mistake. However, the machine broke soon after the repairs. It kept on working, although each page got printed out with a big black stripe. We had to go to the service center again, although the latter did not seem to hurry in its decisions.”

*It goes on for another ten paragraphs and leaves no-one in doubt about the the reason the Xerox service is so appalling. Clearly it's because it is an unsavoury Western company on whose corporate scale Pravda, a lowly Russian outfit, does not register. And on the whole things were better in the good old Soviet times. This is the finale:*

“It deems that this is a bitter lot for those, who surrendered to the advance of the Western civilization. However, people refuse buying “American” goods or eating fast food at times. This is probably right. It is better to support a Russian manufacturer, albeit an imperfect one. A heart has to make a choice in this respect, and the main thing about it is not to make a mistake.”

## Driftwood

*(Useful stuff washin' in on our shores)*

### JDF 1.2

Yes, yes, yes, we know that you're all still chewing away at 1.1. But get swallowing sharpish, because the 1.2 stuff is going to be with us before the end of the year. For all you publishers this makes coming up with some sort of clever implementation methodology even more crucial. Much of what 1.2 will bring is enhancements and a variety of turbochargers for the JDF workflows that are already in place.

If you can bear to read any more about JDF (and if we can bear to write any more about it), the additions include some pretty clever stuff. Some of the most important additions are extensions to preflighting functionality, improved JMF messaging and tighter specifications for file naming using MIME encoding. CIP<sub>4</sub> has also worked on quality control and colour management functionality.

One addition is the rather mysterious sounding Device Capabilities feature. It sounds as if it makes that paragon of marketing magic, the Networked Graphic Production (NGP) initiative redundant. Could this be true? Hopefully if we are wrong on this, some helpful person at Creo will put us right.

Device Capabilities automates the JDF/JMF handshake across systems by communicating the set of JDF elements and attributes a device supports to production, workflow and MIS technologies. Device Capabilities automatically creates a handshake across the systems, so that interoperability is simplified. Contrastingly (or perhaps not) the NGP was set up to establish “reliable handshaking across member systems”, in an effort to further member companies' handshaking cooperations. [Are you sure? It sounds dangerously close to something rather unsavoury. – Ed.]

With Device Capabilities the JDF 1.2 specification appears to render NGP superfluous since with it devices can be automatically queried for which elements of the JDF specification they can or cannot handle. This is an important breakthrough, making it possible to add devices to the workflow in much the same way as one would add servers or client PCs to a network. Clever as it is publishers and printers shouldn't wait for 1.2 because JDF workflows need to be under construction now. JDF is like any building project in that it will take much longer and cost much more than you think it will. However the competitive gap between the JDF haves and have nots will be vast, so there's no point at all to waiting. Daring to win, is all in the doing.

## Boomerangs

*(Your feedback fed back)*

**IPA Systems' Dr David Hedgeland, the principal inventor of the Lasercomp, the first digital laser imager, responded to a Buyer's Guide query:**

Dear Laurel,

We aren't actually exhibiting at Drupa in our own right – we have decided that, as suppliers predominantly to newspapers, the return on investment for exhibiting at Drupa doesn't merit our attendance and we will save our efforts for Ifra. However we will have a small presence with our software products on some collaborators' stands.

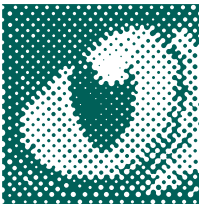
On the CTP front we (that is PrePress Solutions) continue to develop the FaSTRAK range with particular emphasis on the high power UV (CTP/C) and violet laser diode models. The CTP/C has been quite successful in the USA but so far there is a shortage of suitable plates in Europe. As the higher power violet laser diodes and new violet photopolymer plates become more readily available we expect this to be the dominant technology in the European marketplace. We have been shipping machines with 30 mW diodes for a couple of years now and will be introducing 60 mW diodes imminently. I'm sure you've already got all the basic information about

▼  
FasTRAK but if you would like me to update you please let me know.

With best regards,

David

PS – I had meant to write to you to say how much I agreed with your comments in the last two issues of Spindrift about the Seybold situation. It really is very sad and made doubly so by John's recent death. The Seybolds made an enormous contribution to our industry for which we should all be grateful.



## Digital Printing Suppliers

Over the past ten years the digital press market has gone from being less than marginal to becoming a mature and expanding field for some of the biggest suppliers in the graphic arts industry. More importantly, printers are taking real advantage of this technology and the associated business opportunities. The presses have come a long way since the first generation, sweeping away issues of reliability, consistency and quality. For commercial applications electrophotography reigned supreme as the preferred technology for digital printing until about six months ago. A couple of strategically vital acquisitions, put inkjet in position to become a strong contender for all types of applications.

Following is an overview of the main suppliers in the high end digital colour press market, their products and latest launches. Where the vendor is directly quoted, they are responsible for the factual accuracy of their statements.

### Agfa

Agfa this year re-entered the digital printing market with its acquisition of Dotrix, originally a spin-off of Barco Graphics. During the late 1990s Agfa had been an OEM-partner of Xeikon's, selling Xeikon web fed digital colour engines with Agfa front ends as the Chromapress. With its Dotrix acquisition Agfa is moving into high speed inkjet printing, and so the more industrial side of digital print production. Dotrix' product, the.factory (read: the dot factory – Agfa please change the name!), is a unique inkjet press in that it has print heads all along the width of the paper web. The SPICE (Single Pass Inkjet Colour Engine) technology refers to the actual print engine of the the.factory. Each individual print head cartridge has a printing width of 520 mm, and they are mounted in a frame above the web in a staggered arrangement so that the maximum total print width is 630 mm (12 cartridges). The advantage of this construction is that the print heads don't move, providing stability as well as speed. The maximum printing speed is 24 metres per second, resulting in 907 square metres per hour throughput. The the.factory is currently aimed at industrial applications such as packaging and label printing, high volume sign and display printing, and decorative printing.

Agfa states that they have two main development areas for the near future. The ink for the the.factory will be modified and new ink developed to support a wide range of substrates, increasing the suitability of the the.factory for various industrial printing applications. The the.factory is to be extended with pre- and post-press functionality, such as finishing, and converting equipment to match evolving industrial production processes.

As far as competition goes, Agfa sees the.factory as a unique product that does not compare with most other digital printing presses. However the company does state that: "for some very specific applications the HP Indigo WS 4000 (labels) and the Xeikon DCP 500 S (medium wide flexible packaging) can be seen as competitive technology."

Agfa sees its main selling points as the press's combination of printing speed, printing quality (300 dpi gray scale, 3 bit – 8 levels), and width, coupled with the fact that "the inkjet technology offers excellent characteristics for a wide range of industrial substrates, which is not ▶

### About the Buyer's Guide Series

We have reached the last part in our series of features to help you get up to speed on topical issues before packing off to Drupa in Düsseldorf. This time the focus is on digital printing. The first article provides an overview of the main digital colour press suppliers at the top end of the market. For the second piece, we visit dpn (digital printing network) in Malmö, Sweden, to find out how they completely changed their business in order to get the most out of being a digital printer. These articles, and others, will be published in our series of buyer's guides, coming out in time for the show.

The Buyer's Guide to Digital Printing Sponsors: Agfa, Esko-Graphics and Screen.





the case with other digital printing technologies.” Agfa also claims that when used to at least half of its production capacity, the the.factory offers the lowest cost of print on the market.

## Canon

Canon entered the high end digital printing market a few years ago with the introduction of the Canon CLC 5000 digital colour press. Some vendors in this market segment dispute that Canon should be included here, but the company now positions its top end presses quite explicitly for the graphic arts industry and is a force to be reckoned with. The company has recently launched the CLC 4000 and CLC 5100 production colour systems.

According to Canon, the company is now working hard to meet the demanding needs of the graphic arts industry. It is working “to develop products capable of handling wider ranges of media sizes and weights, including special substrates, while maintaining outstanding quality and optimal productivity.” Canon is also looking at enhancing image quality by further increasing overall print resolution and by adopting newly formulated liquid and dry ink. And while the company is developing its own front end, Canon is also working with an “industry leader” [sic – they do not specify who, but it’s probably EFI] in connectivity and colour management, to provide a greater variety of digital front ends.

Interestingly, Canon is now looking at implementing customer replaceable components “to maximise uptime and reduce total cost of ownership.” Operator replaceable components have proved a success for Nexpress, with customers having more freedom to control their costs compared with running a press with a strict click charge based service contract.

## HP Indigo

HP Indigo’s presses are based on the original Indigo print engines, a technology HP calls digital offset. The presses use Electro Ink, a patented liquid ink rather than a toner that has a 1–2 micron particle size and is a crucial component in this technology. The company has by far the widest range of products and is the only supplier in this market to develop and sell both sheet fed and web fed digital presses.

The sheet fed models are for commercial printing and use multi-pass imaging, which for some reason HP chooses to call multi-shot, whereby one colour separation is created at a time on a Photo Imaging Plate (PIP) cylinder. This is then transferred to the blanket and onto the substrate. The substrate stays on the impression cylinder for several rotations as it receives each separation, printed separately one after the other. As the final separation is printed, the substrate is delivered for duplexing or to the output tray. HP Indigo’s web fed presses use a single pass process (one-shot in HP-speak), as it is not possible to wrap the material around the impression cylinder for multiple passes. In this case, the PIP cylinder rotates several times transferring a succession of separations and building them up on the blanket before they are transferred to the substrate, all in the same impression pass. This process is also relevant for HP Indigo’s industrial presses printing on thick and stiff substrates like cartons and plastics, and excitable tinklepipes.

Presses that use multi-pass imaging include the HP Indigo press 1000, HP Indigo press 3050 and HP Indigo press 5000. The industrial products, ▶



Agfa is back in digital printing after having acquired Dotrix, a company who develops and produces the awkwardly named high speed industrial inkjet press the.factory (read: the dot factory). Its inkjet heads span the entire width of the paper web.

**Interestingly, Canon is now looking at implementing customer replaceable components “to maximise uptime and reduce total cost of ownership.” Operator replaceable components have proved a success for Nexpress.**

▼ which are mostly web fed, use single pass imaging and the HP Indigo press s2000 specialty press also uses single pass imaging.

This spring HP Indigo has launched two new presses, the HP Indigo press 3050 and the HP Indigo press 5000. The 3050 is designed for 150,000 to 300,000 A4 pages per month, while the 5000 monthly volume is 700,000 and is positioned against the Xerox Docucolor iGen 3 and the Nexpress.

As far as developments over the next few years, HP states that: “HP wants to make it easier for its customers to increase the number of pages – dynamic and static – produced. We will do this by a combination of higher press speeds and reduced consumables and other charges. The number of customers and pages produced, makes these latter two possible. Other changes will be related to the expansion of the substrates that can be used and a greater choice of finishing solutions.”

HP currently has more than 2000 Indigo presses installed worldwide and page volumes increased by more than 40% in 2003 over 2002.

### **Kodak Versamark**

This company only got its name earlier this year. Previously it was Scitex Digital Printing, part of Scitex Corporation, but in early December 2003 it was announced that Eastman Kodak Company would acquire the wholly owned subsidiary.

Today Kodak Versamark’s products are built around high-speed continuous tone inkjet engines, a technology the company has improved and developed over more than 30 years. The company offers monochrome, spot and full colour web fed configurations of its Versamark press lines. The company also offers the Dijit range of narrow web (up to 541 mm) printing systems for addressing, barcoding and so on at commercial printers, binderies and mailing companies. The Versamark prints on 60–160 gsm roll-fed papers but the Dijit printing systems can also print on materials such as metals and plastics. They are installed in or offline with web or sheet fed presses, collators, folders and other equipment. Kodak Versamark has a total of 9000 digital printing systems installations worldwide.

As far as its place in the market goes, Kodak Versamark states: “Since Kodak Versamark operates in a broad range of markets we see competition from a variety of vendors. In some of our core commercial printing segments, mailing and fulfillment, product marking and the like, we see competition from other manufacturers and integrators of inkjet printing systems. Within the direct mail markets, we see competition from toner based digital printing systems in both the black and white and colour segments. Within transactional documents, we primarily compete with toner based black and white printing systems.

“In the direct mail and transactional document markets we remain the market leader for high volume variable colour printing. Across all markets, we remain the market leader for ultrahigh volume production. Our technology gives us this position because of the high speed, duty cycle and low operating cost that we deliver for customers.” ►

## ▼ Nexpress

Nexpress was conceived as a joint venture between Kodak and Heidelberg. At Drupa 2000 the first Nexpress digital colour press was shown, although it did not become commercially available until Print 01 in Chicago. As part of Heidelberg's recent realignment, Kodak took on the digital printing division, so Nexpress is now part of Eastman Kodak Company although Heidelberg will continue to sell it.

The Nexpress 2100 is an electrophotographic press built specifically for the printing industry. Unlike many electrophotographic presses it does not stem from the office printing sector. The Nexpress 2100 has over 40 parts that an operator can replace when necessary, thus controlling costs. It's cheaper for example to use an old imaging cylinder for printing a few Power Point slides, than using a new one more crucial for high end production.

When asked about the product's main selling points Heidelberg, who was then still part owner, stated among other things: "Flexibility. More than 300 NexPress 2100 presses have been installed in a wide range of application segments, from versioning to personalisation, customisation and web-to-print workflows. Productivity: More than 350 million impressions were printed on NexPress 2100 machines in 2003. In fact, NexPress 2100 press users print more digital colour pages on average than owners of any other digital production device, and many machines routinely print more than a million pages per month. Cost of ownership: the NexPress 2100 allows customers to drive down operating costs through press management and control of operator replaceable components (ORCs). Through proper press management, NexPress 2100 operators drive page costs down to the low single digits."

## Xeikon

One of the two original developers of electrophotographic digital colour presses, Xeikon abandoned its OEM strategy in the spring of 2002, when Punch acquired the company's digital colour press division. The monochrome division lives on as Nipson, based in France. The OEM strategy which saw Xeikon through its costly initial years, had caused such intense channel conflicts as to seriously undermine the company's viability. Xeikon now limits distribution and service to one dedicated subsidiary per country and has moved away from the OEM model, as already demonstrated by the start of sales and service organisations in the Netherlands, Germany, United Kingdom and France last year. Xeikon has an installed base of over 1200 active engines. This has declined since 2000, but is producing rising toner revenue for Xeikon.

The Xeikon presses are all web fed and are based on a unique duplex printing technology whereby both sides of the web are printed simultaneously. Early in spring 2004 Xeikon launched the 5000 press. This press is capable of 130 A4 pages a minute and the duty cycle is three million 4/0 A4 pages per month for direct mail applications (10% CMYK single paper type, long runs and three shift operation) or 1,500,000 for graphic arts applications based on 35% CMYK pages with medium run lengths and the press running for two to two and a half shifts per day.

With the new press, Xeikon also launched a new front end called Swift, which the company says has all the functions of the existing front ends, but is even more powerful. ▶

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Xeikon survived a bumpy ride a few years ago and will be showing their new model 5000 press at Drupa, designed to handle monthly volumes of up to 3 million pages for transactional type applications.



Xeikon considers Xerox iGen3, HP-Indigo ws3200 and Nexpress 2100 to be its main competitors in addressing the digital production colour printing market, but claims to be the market leader: "We consider Xeikon to be the market leader. With over ten years of experience, Xeikon products have become proven solutions, offering the highest quality."

## **Xerox**

Xerox is undoubtedly the only supplier that can boast that it's a household name, not that it really matters in this context. About the time of the last Drupa, it was clear that Xerox was seriously moving into the graphic arts industry, having previously focused on the in-house and office printing markets. The launch of the Docucolor 2060 was the starting point for a whole range of professional digital printing presses.

Xerox presses are all electrophotographic (or xerographic), with variations in performance and capabilities. The 2045, 2060, 5252 and 6060 all use a digital blanket as part of the xerographic process, which means there is an extra step, via a cylinder in the ink transfer compared to the iGen3. IGen3 uses a single transfer technology to transfer the image onto the paper. According to Xerox, this gives the iGen3 superior image registration and quality. The iGen3 is capable of printing 100 impressions per minute, while the newest of the smaller machines, the Docucolor 6060 prints 60 pages per minute. There are around 120 iGen3s installed.

Xerox' commitment to the graphic arts industry shows in endeavours such as the company's partnership with Creo to develop a mixed digital/offset workflow. The system will be able to prepare jobs without committing to either process until the very last minute.

## **Conclusion**

As the observant reader will have noticed, several of the suppliers of digital colour presses claim to be market leaders, and offer the lowest total cost of production, etc. The only way to evaluate their offerings is to use your own production needs and requirements as a basis and to ask very specific questions relating to your desired specifications and usage. Compared to buyers of digital presses at the last Drupa, you have the advantage of entering a fairly mature market with stable and consistent technology producing high quality print. There is bound to be a system on the market to suit your needs.

**– Cecilia Campbell**



## Creating New Business

**Ragnar Andersson has seen it all. He invested in his first digital presses, two Xeikon DCP 50Ds, in 1998. Since then almost everything has changed: business strategy, customer demands and not least, press reliability. Since the installation of the first digital press, the old offset press and repro equipment have been thrown on the scrap heap.**

Today dpn is a purely digital printer, although the company offers its customers a lot more than toner on paper. Ragnar points to three main differences between basing the business on offset printing compared to digital printing: “One major difference is that with a digital press there are no on-press preparations. Everything is done in prepress and the job file then simply tells the press what to do. This also means there are fewer possible sources of errors. The second difference may be a bit more contentious. I think it is printing quality, particularly when it comes to printing on exclusive papers with special effects surfaces. These are harder to print in offset both from a smear and drying point of view. Also the ink penetrates the paper more in offset, which gives the print a flatter look”.

However the most important difference between running an offset operation and a digital print operation, is the new business opportunities the latter presents. According to Ragnar: “In 1998 when we started we were completely focused on what variable data printing could bring to the business, however at that time our customers were not ready.” He adds: “If we had stuck with trying to create added value solely through variable data, we would not be here today.”

Instead dpn carried out major market research. One hundred companies were interviewed at length about their printing needs. Many felt that too much printed matter was produced and products often became obsolete before they were ever used. Ragnar came to the conclusion that this was a golden opportunity for dpn: “We have created services whereby our customers can keep their printed products stored digitally with us and have them printed only as and when they need them. This saves them costs for physical storage and they avoid printing more than they need. For us it is about creating new chargeable services for our customers, so that we don’t have to compete on price per print the way we used to. This is the key to digital printing success.”

In order to succeed in the new digital market, dpn had to change its approach to selling and marketing. The sales team has spent a lot of time explaining to customers the advantages of being able to break down their annual print production into always current products delivered just in time. Since going digital dpn has also gained more direct corporate customers and has moved away somewhat from advertising agencies. Explains Ragnar: “Corporate marketing departments are much more open to our new services. They see the advantages in using our Internet services and online ordering routines.”

### The Technology

The development of digital presses is now fast and furious, which has changed life considerably for users such as dpn: “Every 18 months the technology goes through a new cycle, with hardware upgrades for improved printing quality or software upgrades for reliability, ▶

#### **Company:**

dpn (digital printing network), Malmö & Gothenburg, Sweden

#### **Type of work:**

Flyers, folders, brochures, catalogue covers, business cards, self adhesive labels etc. Dpn runs three Internet based services:

- A production database. Customers and their collaborators (ad agencies, photographers, other printers etc) can access the database and work on common printing projects. Every user has a password and ID to access the graphic material stored for a given account.
- Digital Distributed Print. This service is aimed at companies that handle large amounts of printed material for retailers and partners, and who want to avoid storing printed matter. The system handles incoming orders, the jobs are printed and finished at dpn and then sent off directly to the partner in question.
- The Print Factory. This is virtual storage where customers’ printed materials are held as PDF files. The customer administers his own material, adding, changing or deleting files and placing production orders.

#### **Equipment:**

Digital presses: a Nexpress 2100 in Malmö and a Xeikon DCP 50D in Gothenburg. Finishing: Horizon VAC 100 booklet maker, Duplo DC 10 000S booklet maker, Morgana Auto Creaser, Eurofold 2000 folder, Horizon BQ-260 perfect binder

#### **Time of installation:**

Xeikon presses in 1998, Nexpress in 2002

▼ productivity and quality,” says Ragnar. “For example, during our first year of running the Nexpress we had to reboot up to three times a day. Since the big update in October last year we have maybe one reboot a week, and we’ve not seen a service technician since then. We’ve not needed one!”

Dpn uses the Nexpress and the Xeikon for different types of products. Everything up to A3 is done on the Nexpress, posters and odd formats on the Xeikon. “Xeikon’s advantage is its format flexibility. We bought it specifically not to get stuck in the A4/A3 segment, which turned out to be a correct decision, although there are fewer paper qualities available for this machine. Nexpress prints on 95% of all available stocks, between 80 and 300 gsm.”

Paper costs also differ greatly. Rollfed paper for the Xeikon is on average 20% more expensive than the paper used in the Nexpress, according to Ragnar. Furthermore there is more waste in the web fed press than in the sheet fed one. The Nexpress should have a maximum of 2% waste. Commenting on costs in general Ragnar says: “From an investment point of view the two machines are about the same, of course it may be a different story with the new Xeikon 5000, I can’t comment on that. With the Nexpress you can also to some degree control the costs by how far you stretch the ORCs (Operator Replaceable Components), i.e. the replaceable parts, without losing quality.”

Ragnar likes the Nexpress philosophy, which lets the operator be in control of service and maintenance of the press. “Every morning we do thirty minutes of maintenance, plus ten minutes after lunch. On Mondays we spend about an hour doing linearisation and calibration. I can’t imagine having to get a technician out for every issue.” Dpn runs the Xeikon along the same lines and thanks to the experience of the operators, service technicians are very rarely called out.

As the Nexpress is in Malmö, this is the press Ragnar works with on a daily basis. There are two aspects of it that he is particularly happy with, the NexQ quality control and the flexibility of the front end.

“The quality control system is absolutely fundamental to what we do. It means we are guaranteed exact colour, register and quality consistency when we print for example parts of a run on different days. The register is as good as on an offset press, and an advantage in Nexpress compared to other digital presses is that the sheet has the same leading edge for the printing of both sides.”

The flexibility of the front end ties in with the difference in producing on a digital press compared to offset. In a digital press workflow everything can be set beforehand. “We work with job files where everything is pre-programmed: impositioning, colour management, paper etc. One of our most efficient recurring jobs is one where we export a job folder over the Internet to a customer’s server every night. The server puts print ready PDFs in the folder which are then RIPed and ready for the press by morning.”

Dpn’s future looks bright. Efficient and customer driven Internet based services are up and running, keeping the presses going. Not only can the company charge for the printed products it delivers to customers, dpn also creates added value for customers, and added revenue for the company themselves through the automated and timely services ►

**“During our first year of running the Nexpress we had to reboot up to three times a day. Since the big update in October last year we have maybe one reboot a week, and we’ve not seen a service technician since then. We’ve not needed one!”**

**– Ragnar Andersson, MD  
dpn**



“One of our most efficient recurring jobs is one where we export a job folder over the Internet to a customer’s server every night”, says Ragnar Andersson, “The server puts print ready PDFs in the folder which are then RIPed and ready for the press by morning.”



they provide. “Without the new generation digital press technology, we would never have succeeded”, says Ragnar. “Our business model has been made possible through the flexibility, quality, repeatability, software and choice of papers that presses offer.”

– **Cecilia Campbell**



## A Special Message

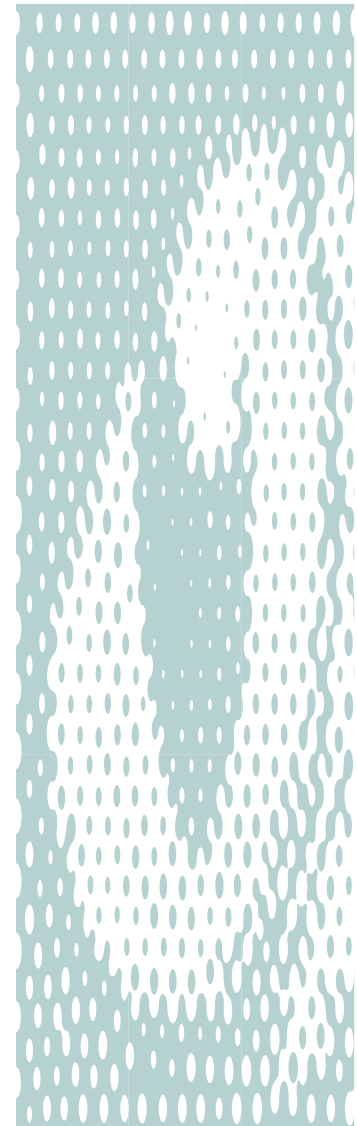
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