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Spindrift

...Scandalising The Graphic Arts Industry Since April 2003

News Focus • Opinion
Reviews • Techno-Babble
Attitude

Volume 4, Number 3
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sew • v. **1.** join, fasten, or repair by making stitches with a needle and thread or a sewing machine. **2.** (sew something up) informal bring something to a favourable state or conclusion.

– From the Concise Oxford English Dictionary

Dear Reader,

It has finally happened – with the launch of Xpress 7, Quark has given themselves a fighting chance in the battle with Adobe for layout supremacy. While any sensible person may argue that the world is indeed vast enough to be home to two professional design programmes, the debate that’s been ongoing since the first Indesign beta (remember K2?) in the late 90s suggests not. Of course, Adobe was given a unique opportunity to step into a market that Quark surely thought it had pretty much sewn up. This attitude lingered despite the new competition, and has since cost the company dearly. The first version of Indesign may have left a considerable amount to be desired – printing was a nightmare – but everyone was willing to wait for an alternative to Xpress, or rather Quark. With Indesign 1.5 it arrived. And you didn’t even need to call Switzerland to obtain extra dongles – you didn’t need them at all! All of this is now history. Adobe has refined its software into a very sophisticated layout tool. Quark has worked hard to change its attitude to customers, change its logo and much of the management, and develop its product. We have tested Xpress 7, and we are impressed – finally here’s a real alternative to Indesign, with serious colour management (long missing) and even a number of features not present in its rival. The launch of Quark Xpress 7 means the printing and publishing industry has a choice and this is a very good thing. Read Paul Lindström’s comprehensive Xpress test on page 8.

Enjoy the read!

The Spindrift crew,
Laurel, Cecilia, Paul and Todd

In This Issue

In the eleventh hour

Quark has finally released the much awaited version 7 of Xpress, which, after years of less than impressive efforts, looks set to go head to head with Adobe’s Indesign. Writes Paul Lindström, who has tested the new ware: “Xpress 7 actually does offer some important and unique features, not present in Indesign.” Find out what these are...

see page 8

Hybrid Hallelujah!

In the second and final part of our series on FM and hybrid screens, we not only present the results of the screen tests, but also give you an overview of the players and products in the market. Paul Lindström comes down in favour of the hybrids of this world: “What they all have in common is that they hold highlight dots and the deep shadow dots really well, and produce very sharp and detailed images.” Read our comprehensive screening guide...

see page 12

Ambivalence at Xerox

Laurel Brunner took part in Xerox’s recent European Analysts’ Briefing where she found the company to be pulling in two directions at once: “The incompatibility between Production and Xerox Global Services [divisions] is an operational time bomb putting in jeopardy Xerox’s future as an independent supplier of print and information technologies.” Read about what else she found...

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News Focus

Quark has announced the availability of Quark Xpress 7, the newest upgrade to its flagship product, Quark Xpress. Debuting worldwide, the widely anticipated Quark Xpress 7 software has apparently “been praised for new and innovative features that promote better design, faster production, and more efficient collaboration — transforming the business of creative communications”. Who are we to disagree? See our review on page 8.

Agfa-Gevaert's first quarter results show an increase in group sales to €810 million, up 8.1 percent compared to the first quarter of 2005. For Graphics strong growth in digital printing plate sales compensated for the decline in sales of analogue products, and although raw material costs have continued to increase in recent months, the Group was able to improve profitability. Graphics sales were €424 million, up 6%, with earnings at €20.1. This is 4.7% and an improvement over the same time last year when the profit ratio was 4.2%.

Printing.com which began trading in 1998 and now has 150 franchises and outlets throughout the UK, has selected Kodak's Realltimeproof Partner software. The company plans to triple in size over the next few years and will standardise on Kodak's softproofing software for all outlets.

Markzware has released the Microsoft Windows version of Q2ID, the Quark Xpress to Adobe Indesign conversion tool. This Indesign plug-in requires an installed version of Indesign v3 (CS) or v4 (CS2). It enables Indesign Window and Macintosh users to convert Quark Xpress 3.3, 4.x, 5.x and 6.x data into a native Indesign document format. Q2ID converts numerous elements of an Xpress document including, but not limited to, layers, page size, style sheets, fonts, text, images, lines, tables, etc., as long as Indesign supports the elements.

Imaging Alignment Corp. will distribute Humaneyes advanced 3D lenticular technology in the USA.

The world's first **hybrid digital and screen printing** machine has gone live at SMP Group in London. The beta version of the M-Press printing system co-developed by Thieme and Agfa, combines digital and screen printing in a single print line.

The Japanese Newspaper Publishers and Editors Association (JNPA) has awarded a silver medal and letter of commendation to Goss International for the **Goss Flexible Printing System (FPS)** press. The award recognizes innovative technology and was based on the video presentation of the press at the last JANPS newspaper trade show in Tokyo.

Enfocus has announced it is developing a version of Pitstop exclusively for Creo PODS. Pitstop EDIT is an abridged version of Enfocus' preflighting, editing and correction application, and is initially available with the new Creo PODS' Spire CXP50 colour server which drives the new Xerox Docucolor 5000 digital press. Pitstop EDIT will also be available for the Creo Spire CXP8000 colour server for the Docucolor 8000, and the Spire for the iGen3 110 and 90 production presses.

Xerox has introduced five new products. The A4 and duplexing Docucolor 5000 for printers producing from 30,000 to 150,000 impressions per month, for marketing brochures, posters, and direct mail, the Xerox Phaser 7760 tabloid colour laser printer for proofing, plus three new machines for the office market. See our Xerox feature in this issue for further details. Xerox has also signed a five-year, multimillion dollar deal with AM General – designer and manufacturer of Hummer and Humvee special

Spindrift

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▼ purpose military vehicles. As part of the deal, AM General has replaced an aging fleet of systems from Canon, HP and others with nearly 100 Xerox networked digital multifunction systems, as well as a production printing system for its high-volume print jobs, including owner manuals and sales training manuals. Three full-time Xerox business services specialists will also be on-site to run the print centres and manage the fleet.

According to the press release Kodak's new version of its **Spotless** software for generating multicolour screens "unleashes a wider spectrum of spot colors". Stand clear! Dots stampeding!

Xerox has also announced **E-Agent**, an embrittling agent. Good grief. There is no such word, and while we are the last to discourage the invention of new words, they simply must sound right. This one brings to mind disease, decay and damage, but it is actually a special chemical ingredient to reduce the energy required to produce some Xerox printer toners by up to 22 percent. E-xcellent idea because by 2008 Xerox will be able to save more than 30 million kilowatt hours of electricity. This is apparently E-nuff to power the lights in over 24,000 households for a year. Cool technology but really a naff name.

Finally, Xerox is calling for entries into its **PIXI awards** for the best in digital print. There are several categories: Variable Print/1:1 Marketing, Communications, Digital Books and Manuals, Short-Run Digital Colour, and Monochrome and Highlight Colour. There are over €42,000 worth of prizes, which will be awarded at the PIXI Awards event at Graph Expo in America this autumn. You have until the 17th July, a magical Pixie day, to enter. www.xeroxawards.com

Tansa Systems AS, provider of advanced text proof-reading tools for several languages, has signed a new licensing agreement with The Canadian Press (CP), Canada's national news agency. Who says knowing how to spell is important.

Kodak Teamworks 2.0 collaboration software was recently demonstrated. This server based project management technology is designed to streamline content creation and improve "stakeholder communication". Stakeholder communication? What a wonderful expression. Images of warriors with big sticks. Apart from the sticks this sounds like a belated Kodak response to Agfa's and Esko's project management tools.

Sun Chemical and Heidelberg are extending their cooperation on new projects. The two cooperated on the new Heidelberg Anicolor inking unit, integral to the new Speedmaster SM 52 four colour press launched at IpeX. Heidelberg is also cooperating closely with Xerox, but no details are yet available.

Pitstop 7 is now available and costs €599.

Krause has published euphoric sales figures following IPEX. Including its 22 platesetters sold to an Indian newspaper, Krause reached a turnover of more than €2.5 million at IpeX and sold other CTP lines for about €3 million shortly after the show.

Fujifilm Graphic Systems has sold its first Luxel V-8 HD CTP system to Belgian printer Dessain Printing, which specialises in high quality heatset web printing of brochures, catalogues and magazine inserts.

HP has announced first quarter net revenues of \$22.7 billion, up 6% year over year. Operating profit was \$1.5 billion and the Imaging and Printing Group contributed revenues of \$6.5 billion, up 8% year on year and an operating profit of \$973 million, or 14.9% of revenue. This is an increase over the previous year, but profit as a percentage of sales is down from 15.4% of revenue. Unit growth was 20% with commercial hardware revenues up 6%, shipments of colour laser printers up 36% and printer-based MFP shipments up 40%. Supplies revenue grew 11%.

HP has also announced record sales from IPEX. The company completed a number of new sales to customers around the world of what it calls its "postcard-to-billboard series of small, wide and superwide format digital printers and presses". HP sold ten HP Indigo press 5000s in a single day to customers in the United Kingdom. The company also took a number of orders for its label press, the HP Indigo press ws4050.

Since IPEX, HP has launched the HP Indigo Commercial Job Estimator for calculating job costs for digital and conventional presses to aid production decisions and maximise profitability. This sounds like a very clever tool. It is designed for customers who want to compare and contrast the cost and timing profiles of digital and offset printing processes, to help identify crossover points for accurate commercial print estimating.

Presssense and Directsmile have successfully integrated Presssense iWay Prime and Directsmile's image ▶

▼ personalisation software. Users of the two can create personalised image templates and integrate them directly into a template in the iWay Prime web-to-print workflow.

Global Graphics is taking its XPS technology development into a new phase with new initiatives for digital printer and copier manufacturers, and commercial print workflows. XPS (see Driftwood in issue 3-4 and the Postscript/PDF feature in issue 4-1) is the new print and document format for the upcoming release of Windows Vista. Global Graphics is developing XPS filters to provide more components for host-based workflows, tools to improve the efficiency of embedded devices which have limited resources, and XPS conversion technology for print and print related workflows and for use in application software.

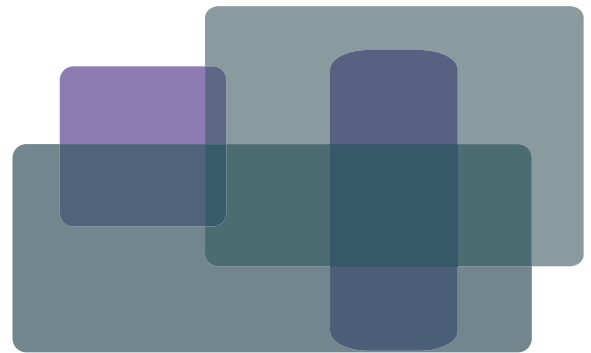
Sansui Software has announced Autotag, an option for its Publishnow software. The technology simplifies re-use of content created in Adobe Indesign by automating the processing of Indesign files to produce XML tagged versions for Publishnow. This makes them accessible for editing, resizing and proofing in a standard browser, so it saves time and cost.

Artwork Systems has announced its financial results for the second quarter and the first semester of its financial year 2006, ended March 31, 2006. Consolidated revenues for the second quarter were €12.55 million, up 11.06% compared to the €11.30 million for the second quarter of fiscal year 2005. But net income was slightly down to €3.03 million, a decrease of 0.85% compared to the €3.05 million in the second quarter of fiscal year 2005. Net income for the first semester was up though, to €6.37 million, an increase of 9.02% compared to the same period in 2005.

Good news for **Esko**, with a strong performance in the first quarter of 2006. Consolidated net revenues increased by 20%, and EBIT (Earnings Before Income Tax) was up by €1.5 million compared to the first quarter of 2005. Software sales produced the strongest increases at over 28% higher compared to last year. The Cyrel Digital Imager (CDI) product line grew by 15% and maintained a global market share in excess of 70%. All regions contributed to the revenue increase, with North America and Japan growing by 25% and 40% respectively compared to last year.

The **British Standards Institute** is looking for help. The BSI Group is one the leading providers of profession-

al services to organisations worldwide and is involved in standards setting, product testing, certification, and quality management services. To further develop its work with donor funded projects (EU, World Bank, EBRD, ADB...) in emerging countries, the BSI is looking for French, English and Spanish speaking experts for consultancy and training assignments in standardisation, technical regulation, quality management, product certification and testing, accreditation, metrology and market surveillance. Experts with appropriate qualifications and who can demonstrate at least 10 years of sector-related experience should contact Emmanuel Herve, Email: projects@bsi-global.com



Spindocs

(Where the spinner gets spun!)

We found this in a print management company's brochure.

The company is called Fast Ant:

"As you would expect from our name, we think of ourselves as a hard working colony with organisational skills to match. But the Fast Ant colony doesn't just include our own industrious and totally committed individuals, it also includes our customers and suppliers who we treat with equal respect."

Just how many customers look themselves straight in the eye and see an ant? And, given that there are about 8800 different sorts of ants, what sort would the Fast Ant people be, Army ants perhaps?

According to Dale Morris writing for the BBC: "Army ants possess a powerful sting, which ... may help to liquefy as well as immobilise prey – helpful, because adult ants cannot eat solid food, and they survive on liquid lunches."

There are also Driver ants, which eat up their prey from the inside out, having entered an animal, dead, alive, drunk or asleep, through the mouth or nose. Yum.

Print customers may appreciate the connotations of Fast Ant's name. Lesser fans of print management companies might also agree that this is a good name for the company, but probably not for the same reasons.

Driftwood

(Useful stuff washin' in on our shores)

Random Movement Printing Technology could be the next generation of the ultimate word processor, the pencil or maybe coloured crayons.

A company called Print Dreams has patented its Random Movement Printing Technology (RMPT) and announced

Printbrush, the world's smallest printer. It's about the length of an ordinary pen and the breadth of a mobile phone and weights around 350 grams. Printbrush is format independent so it can print any size, anywhere and on anything, includes network connection technology and can connect to the Internet, send images and SMSs and most crucially download data via Bluetooth.

Swipe it across a printable surface and the print appears before your very eyes! Just think what this could mean for the tattooing business! Just think what this could mean for interior decorators and exhibition graphics! It's a paintbrush for covering surfaces with digital data!

We haven't had a go on one of these yet, but its developers claim that it "takes into account all thinkable parameters of the hand movement, including rotation and sudden changes of speed and acceleration. The result[ing] image on the printed media is always very much alike [sic] its digital counterpart."

RMPT is based on algorithms that replace the paper feeding mechanisms of traditional linear printing devices. It will work on almost any flat surface and consists of a controller ASIC plus an optical sensor. The controller receives bit mapped print data, navigates its way across the print surface and sends print commands to the printhead. The print head works with user replaceable print cartridges, and presumably some sort of inkjet technology, but details aren't available.

Print Dreams licenses RMPT technology on an OEM basis so that companies can develop, manufacture and distribute products under their own brand name. Xyron Inc. has already announced a product based on Print Dreams' technology. The Xyron Design Runner is a \$160 monochrome device for home use.

See www.printdreams.com for further info.

Boomerangs

(Your feedback fed back)

The following was posted on the CTP Forum but we think it merits broader distribution:

I have been working with the Quark 7 beta, and have found that they are turning color management on by default, and that they are using some Generic Profiles that are going to screw up MANY people.

Because I have seen this, I acted on it and have Reported the Issue with Quark via online submission (basically as a bug report). This is SO important that people are building with either the SWOP (if using relative colorimetric intent) or GRACoL 7 profile, but definitely NOT Quark's Generic profiles.

This is what I told them:

"THIS IS URGENT! I work in the printing industry, and am a 11 year prepress technician. I have been following the GRACoL 7 recommendations very closely, as well as the Printing Across Borders initiative, and must say that the profiles Quark is planning to use in Quark 7 are WAY off what U.S. printers have been printing for years (based on ISO TR001) and is also WAY different than the new GRACoL 7 methodology that is being considered to implement into ISO sheetfed standard. TR001 and GRACoL 7 have basically the same Neutral Print Density Curve. Quark does not even closely match the appearance of the new GRACoL 7. I very strongly urge Quark to reconsider the default profiles they plan on using in Quark 7, for everyone's interest. And to also reconsider turning color management on by default. It will screw up a lot of people if this happens with the existing Quark Generic profiles that Quark plans on implementing in Quark 7. For more info, see GRACoL's (General Requirements for Applications in Commercial Offset Lithography) website, www.gracol.org Also, I would recommend using sRGB IEC 61966-2.1 profile since all untagged RGB received by prepress is most likely in this profile, since it has been the RGB standard profile implemented by Microsoft and

HP years ago. So please, please reconsider the default profiles for Quark 7."

Quark asked what they can do to make the problem appear to them: Open an existing image in Photoshop with Adobe's SWOP profile (based on TR001), then assign Quark's Generic CMYK profile to the image. WAY OFF! Now, if you had a GRACoL 7 profile you would see that if you assign this GRACoL 7 profile to an existing SWOP image (what most images have been separated to for years in the U.S.), the image appears basically the same. So I'm desperately trying to help Quark from making a big mistake, which will help Quark and everyone else also. Please get in touch if you need any more info.

Don Isbell
Dawson's Printing, Inc.
Memphis, Tennessee

We've also received a comment to last issue's Spindocs about the glossy but misdirected marketing from HP.

Namaste Laurel,

I couldn't help but laugh about the Seybold address bit. Well written and 'touché.' It's the human element that fails us after all. Someone obviously didn't bother updating the database! I'm sending this through to a few people to have corrected.

Best regards,
Richard

Richard de Boissezon
<richard.de-boissezon@hp.com>

Say What?

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

We found this in the Seybold Bulletin, and we can't let it go by without correction:

"No new trends in digital platesetting or plates were evident at IPEX. Plate vendors presented complete solutions that encompassed both ends of the spectrum (visible and thermal), especially for those who print a four-page format and are just getting started with computer to plate.

"The proponents of thermal technology (such as Kodak) showed their entry-level systems, as did those promoting violet technology (Fujifilm, for example), which didn't make the choosing between thermal and violet any easier. Printers who don't like either of those technologies could choose conventional-plate systems from Basysprint (with a new six-page model for web presses) or from Lüscher (new to this market, adding a UV platesetter for conventional contact plates to its existing line of thermal platesetters)."

For the record, new trends in CTP at IpeX:

Processless plates that image close to the speed of processed digital plates (thank you Fuji).

Thermal and violet imaging are interchangeable (thank you Agfa).

Imaging speed that gets a four colour set imaged in less than five minutes (thank you Screen and Fuji).

Production economics drive CTP investment, because the technology is no longer an issue.

Machines are available for very specific applications (thank you Screen, Agfa and Lüscher).

Acrobites

(Something to get your teeth into)

SRA

SRA stands for "supplementary raw format A". These paper formats are only slightly larger than the corresponding A series of formats. Sheets in these formats will be cut to the end format after binding. The ISO RAO format has an area of 1.05 m² and the ISO SRA0 format has an area of 1.15 m².

WINE

A Windows Emulator is software for running Windows and DOS programs under Unix. It includes the tools necessary for executing Windows binary and for implementing Windows API calls with their Unix equivalents, a sort of universal translator from Windows to Unix. Wine is free and gets updated regularly (we wish). Go to comp.emulators.ms-windows.wine for new release announcements.



Advantage Quark

It has taken a while (too long some might add), but now Quark Xpress 7 has finally been launched and is ready to overwhelm the world in a frenetic flurry of sales. No matter that some of Xpress 7's new functions are already in place in the main competitor, Adobe Indesign. No matter that Quark's tarnished reputation could still do with a bit of shining up, because Xpress 7 actually does offer some important and unique features, not present in Indesign. Besides this though, after so much promise and purchase-inhibiting industry chit chat, now that Xpress 7 is finally released we have something else that's new: choice. This is extremely good news for all of us.

Whether people make the choice to actually go with Quark is another matter. Will new feature sets alone be enough for people to choose Xpress over Indesign? Will they be enough to convert former Xpress users back to Xpress from Indesign? Most critically are they reason enough to persuade remaining loyal customers to stick with Quark now and in the future? The answer to that question is more a matter of Quark's behaviour than of Xpress's.

New Features to Wow About

The merits, relevance and wow factor or otherwise of Xpress 7's new features depend on one's perspective. For me personally it's the features in Xpress 7 relating to colour management and collaborative workflows that impress the most. I have to admit that it's been quite a while since I've worked daily with layout and design, however there are also lots of new features for designers to explore. There is a new way to manage transparencies based on colours, and there are more efficient tools for controlling and aligning objects. Drop shadows can now be created without the need for special extension tools.

Xpress 7 has a new and very flexible user interface, so users can create custom palette groups. Some of the palettes, for example the measurements palette, are dynamic, so the palette expands when activated and to some extent collapses when it isn't being used. The arrangement of palette groups can be saved in sets, useful when working on different types of production. Another improvement to the user interface is the possibility of working with multiple layout views, either by splitting the windows horizontally or vertically. You can also compare different versions in a split view, or apply different scaling to different sections of the view. The size of each pane in the open window can then be individually adjusted. A handy feature is to apply different colour settings to the different views and compare the effect.

What's possible with the Job Jackets in Quark Xpress 7 goes beyond what's possible in Adobe Creative Suite, where you are limited to creating and exporting JDF files in Acrobat.



In the last couple of months Quark representatives have been busy demonstrating Xpress 7. Gavin Drake, pictured here is responsible for Quark's position in Western Europe.

Colour Management Muscle

Proper colour management hasn't been a Quark strong point. For much too long they ignored the work of the ICC and its standards, preferring instead to rely on some proprietary work by Efi. Quite late, considering the market, Quark introduced some half-hearted adoption of ICC based workflows, but the company has never been really convincing when it comes to colour management. This has finally changed much for the better in Xpress 7. It has a set-up that is significantly easier to use and understand, where you can define source and output colour spaces separately. Advanced colour management doesn't ever seem to get any easier to grasp, but Quark has at least made a solid effort to make it easy to change between different settings. You still have to know what you are doing, but it's now possible to do colour critical soft proofing accurately, even on pictures that are still in RGB.

Quark also uses something it calls display simulation. One of the predefined output sets shows how the page will look, if it is printed in black and white only – quite useful in for example newsprint production. Display simulation covers a range of options such as process colour view, or process and spot colours, depending on the proofing requirement. It is very handy for preliminary soft proofing.

Quark has extended the possibilities for adjusting images within Xpress 7. This is thanks to the Quark Vista extension, now included for free. Xpress 7 includes a whole range of editing features, besides simple adjustments of gradation and contrast. It's also possible to adjust colour balance, saturation and even do selective colour corrections. The change only affects the images as they appear in the actual document, the originals are left untouched until later. It's often necessary for the designer to adjust some of the images slightly to harmonize in tone and contrast with the rest of the images on the page or spread, and this is a handy way to do it.

Collaborative workflows

Xpress 7 has a lot of features to facilitate workflows where several people work in teams. One welcome feature is the possibility for document sharing, which also works for parts of a document. This provides other users with access to documents or document parts, which Quark calls composition zones. These zones can also be exported as separate documents and when an original layout or document is updated, all other documents or layouts are updated automatically as well, which is fiendishly clever. As a project is about to complete, the links are closed and it's then only one person who can make last minute changes.

But it's not only layout and documents that can be shared. Xpress 7's new Job Jackets technology is a means of defining a whole range of production parameters. The Job Jackets is a Quark specific extended electronic job ticket, but it can be exported in JDF (Job Definition Format). Since Quark Xpress supports preflight according to PDF/X standards and col-

Technical Requirements

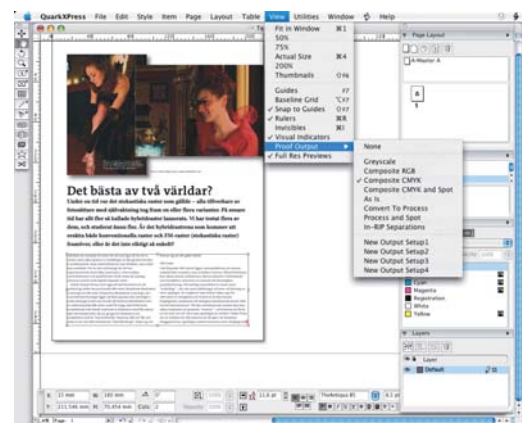
The following platform and hardware system specifications are required to run Quark Xpress 7:

Mac:

Mac OS X, version 10.3 (Panther) or later. A minimum of 128 Mb working memory and 300 Mb storage space. Prepared for Intel-Mac.

Windows:

Microsoft Windows XP. A minimum of 128 Mb working memory and 250 Mb storage space.



XP7's snazzy new user interface. Some of the customisable palettes are dynamic and only show information and tools relevant for the marked objects. The palettes can be organised in sets and activated depending on the type of production.

our management according to ICC standards, it's now possible to define a whole range of production intents within Xpress 7. This includes such things as layout templates, typography and fonts, preflight profiles and ICC profiles. If the Job Jackets are fully implemented they should help to ensure the files within a workflow are fully printable and the company's and/or product's design profiles are met. For the designer it should be easier to start up a job and get all the design intents right, without a lot of manual settings needed: less faff more flow. What's possible with the Job Jackets in Quark Xpress 7 goes beyond what's possible in Adobe Creative Suite, where you are limited to creating and exporting JDF files in Acrobat.

Increased creativity

In addition to the enhanced possibilities in Xpress 7 for managing transparency, both the colour engine and font management are totally new. Up until now Quark has used Quickdraw in the Mac OS and the Windows GDI (Graphics Device Interface) in Windows. Xpress 7 however uses the Quartz imaging engine within Mac OS X in combination with what Quark call Xdraw, and the new GDI+ in Windows. All in all, the result is faster screen presentation as well as better image quality on screen. A positive side effect is that document size has come down, so a document that, for example, occupies 300 Mb disk space in Xpress 6 would only take up around 15–20 Mb saved in Xpress 7.

Coming back to transparency, this is actually quite a complex topic, because it's not just about managing a document layer and how much of it is visible. It is also about how the colours in different layers interact if one object is set to be more or less transparent. Quark prefer to refer to colour and opacity, and there are several ways to control this in Xpress 7. Perhaps the more exciting one is to define it based on colour choice, but colour and opacity can also be applied to text objects. Here I must admit that my limited design creativity prevented me from fully envisioning how this can be used, at least in a way that is actually pleasing to look at. I'm sure proper designers will appreciate the new possibilities offered, and explore them fully to produce results people will actually appreciate.

The font management has also been improved, with full support for Unicode and Open Type and improved hyphenation and justification. The Font Fallback function searches for a font that is used in an imported text and non-breakable characters, such as fixed spaces and lines, are easier to access. The glyph palette displays all characters in a font, but you can also choose special characters through the Character Attribute dialogue box. The dynamic Measurements palette will also display some of the main characteristics and options.

Cross media publishing

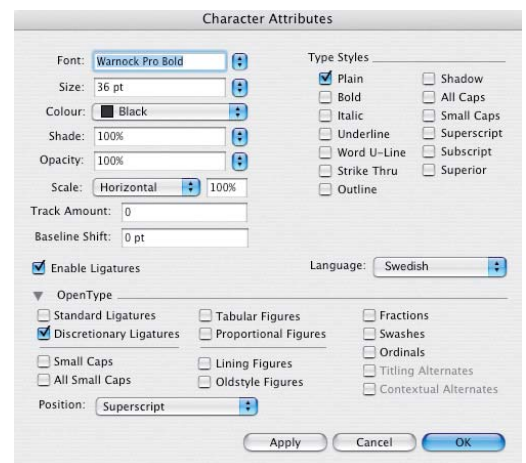
Quark started to support cross media production with features in Xpress 6, and this has been extended in Xpress 7. Quark calls it multi-format



Amongst the new features in Xpress 7 is the option to share a document, or its parts, with other users. Quark calls this feature Composition Zones.



One of the more exciting new features is the enhanced ways of applying transparency and opacity to objects, both images and text, by colour choice.



In conjunction with the extended support for Unicode and Open Type the character palettes have been expanded, and the new Glyph palette gives a good overview of the characters available.

publishing and includes export to HTML and PPML (Personalized Print Mark-up Language), with some predefined output style options. Another output format is of course PDF, including subcategories such as PDF/X. If PDF/X is chosen, a preflight control will be executed and when this is used in tandem with well defined Job Jackets there should be a good chance of producing printable files in the workflow, without the usual agonies.

The export to HTML didn't produce a very impressive result in our small test: most of the text was converted to images with poor resolution with default settings. But this can be modified to get a better end result. Also we used a beta version, so the final version may yield a better result for HTML export.

It looks good!

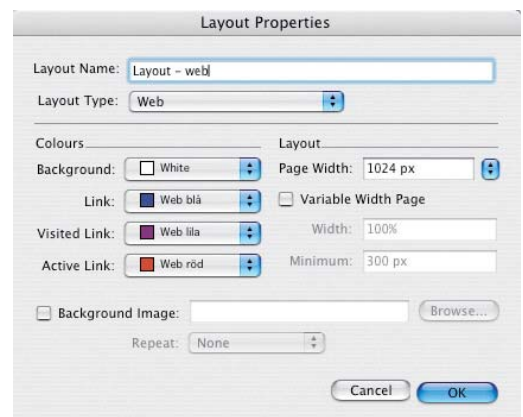
Our overall impression testing the beta version was very good indeed with no crashes or sluggish behaviour whatsoever. The user interface is improved in several ways, and the performance is good. We fear that some of the features, like the Job Jackets, may seem complicated to manage for many users, but on the other hand they may be a key feature in some workflow scenarios. And anyway, what seems complicated at first, always gets simpler once you've put in a bit of hard graft to work it out.

It's perhaps not really fair or meaningful to compare Quark Xpress with Adobe Indesign because they both have their benefits and drawbacks. However apart from the fact that there's really no such thing as fair, these two products are going for the same markets, fulfill largely the same application requirements, and share a common evolutionary path. Quark Xpress held onto an extremely strong position as the preferred layout software for such a long time. It was the first desktop tool to provide proper, grown-up typography, it was robust and reliable, and it was precise enough for real publishing. For several tedious and very dull reasons Quark's seemingly entrenched position was usurped by Adobe and their wonderful Indesign layout technology. For years Quark had done itself few favours when it came to customer relations, and created an opportunity with customers that for the last ten years Adobe has exploited with almost Machiavellian skill. With the launch of Xpress 7 Quark has a very real chance to regain some long lost ground, and at the moment in this game of digital tennis, I believe we have to say that it's advantage Quark. What happens when Adobe serves next with the eventual launch of Creative Suite 3, is another matter.

– Paul Lindström



Quark Xpress supports cross media publishing through predefined export styles. Among the options are HTML, PPML and PDF.



It's supposed to be quite easy to switch between different layouts in Xpress 7, for example print or monitor based (Internet through HTML).

The Best of Two Worlds

Part 2

In our last issue we provided an overview of screening technologies, including so-called hybrid screens. We have also tested some of the leading hybrid and second generation FM screen technologies, and in this concluding part of our work, we present the results of our investigations.

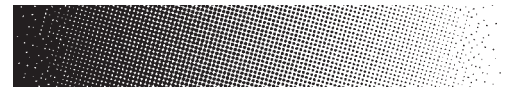
To be able to better evaluate whether these new screens really meet expectations, we asked CTP manufacturers to print a test form, using their new screen types. Most vendors were keen to participate in the project, but then for different reasons never got around to sending back to us printed samples. Now why would that be? We had invited the best-known CTP suppliers to participate in the test and most of them did so. However there are other suppliers who also should be considered, if you are planning to invest into this technology.

The Products

The following list includes most of the products on the market, with a description of the screening technologies based on how they are presented by the vendors. In several cases the same underlying technology is slightly modified and branded differently. For example Global Graphics offers its screen technologies for OEM partners which use the Harlequin RIP system. The number of technologies is actually lower than what appears in the product listing, however the large number of hybrid and second generation FM screening products indicates a keen interest from both the vendor community and of course, from the user side.

In general the users seem pleased with both the hybrid screens and second generation FM screens, although there are of course exceptions. When there are problems with high frequency screens it may not be because of the screening technology, but rather a problem in production, either in the CTP, the processor, the plates used or, but less likely, on press, as long as screen settings were chosen according to paper type. With high screen rulings and small screen dots, strict process control is mandatory. Several vendors recommend thermal plates for the FM screens, although not all of them. Fujifilm for example, does not restrict its customers when it comes to Taffeta, Fuji's second generation FM screen. Fujifilm has stated that its latest generation of Brillia violet plates, the LPNV, can hold an FM screen, so presumably these plates are able to image hybrid screens as well. Agfa, Fujifilm, Kodak and Screen have all contributed to this testing project, but before presenting our test results, below is a list of most of the vendors and their screening products.

In general the users seem pleased with both the hybrid screens and second generation FM screens, although there are of course exceptions.



A typical hybrid screen holds the shadow dots well by never creating a dot size that can't be printed. The same goes for the highlights – by "thinning out" the dots the appearance of a screen of less than 1% tone value is obtained, while always keeping the dot size at a printable size. Image kindly provided by Kodak.

Agfa

Users of Agfa equipment can choose from a range of screen types, with ABS (Agfa Balanced Screening) at the classic AM end of the spectrum and Cristal Raster, Agfa's first generation FM screen, at the FM end. Agfa often describes its Sublima hybrid screen as an XM screen, meaning Cross Modulated, to indicate the move from FM-type screening in the highlights, to AM screening in the midtones, and back to FM-like screening in the very dark shadow tones. Agfa holds patents for this type of hybrid screen, but when evaluating similar screens visually, it's difficult to see, at least for a layman, how Sublima differs from the competing hybrid technologies such as Heidelberg Prinect Hybrid Screening, Kodak Maxtone, Rampage Liso and RIPit Perfectblend. However it's apparent that although the underlying technologies may not be the same, the screen patterns they produce look very similar under a loupe.

Agfa launched Sublima very early on, and can list many, many happy users, both within commercial printing, packaging and newspaper printing. There are well over 1000 customers working with Sublima worldwide. Our test forms were printed by Wesel Kommunikation in Baden-Baden, who uses Sublima for about 20% of its jobs.

Sublima doesn't need to be produced with thermal CTP and plates, but like all high frequency screens, it demands strict process control. Users of Sublima can choose between different dot sizes for the smallest screen dot, and screen rulings up to 340 lpi. Agfa recommend a standard setting of 20 microns, which corresponds to a 2% dot at 175 lpi. When printing on uncoated paper it may be recommendable to instead choose a 30 micron screen dot, or even 40 micron, to get a stable result on newsprint. A side effect of the hybrid screen technology is that users may experiment using lower resolution in the CTP and still achieve good images. Agfa claims that it's possible to produce a 175 lpi Sublima screen at 1200 dpi, and this speeds up the plate making considerably.

Artwork Systems

Artwork is mainly active in packaging printing, and offers customers both FM and hybrid screening. There are two versions of the hybrid screening technology: Classic Hybrid and Quantum Hybrid screening. The user can define where on the tone value scale the transition from FM to AM screening will take place and objects and images on the page can have different settings assigned to them.

Esko

Esko is another of the major players in packaging and offers a wide range of screening technologies. If there were a prize for the most imaginative names, Esko would be amongst the nominees with product names like Samba Flex, a second order FM screen, and Groovy Screens, a screening technology created to reduce ink consumption in flexo. Esko also offers a high frequency AM screen called Hiline. At 3200 dpi resolution Hiline can be used for up to 582 lpi screens! Esko claims that the printing

Our favourite feature with all the hybrid screens, be they AM or FM based, is that they all eliminate rosettes beautifully (yes, with hybrid screens they might still be there, but are so small you can't see them).

parameters can still be the same as for more conventional AM screens at more moderate screen rulings.

Founder

The Chinese company Founder is slowly making its way into European and other international markets, with a hybrid screen called FAM in the Eagle RIP system. The dubious name indicates the mix of AM and FM technologies.

Fujifilm

Fujifilm offers a range of screening options, not least since Fujifilm not only offers its own Celebrant RIP system, but in many regions also sells the Rampage RIP system. In the Rampage RIP it's possible to select individual objects on a page and apply different screens for them. For Celebrant, the hybrid screen is called Co Res, although it perhaps more correctly should be defined as a high frequency AM screen. The second order FM screen is called Taffeta and for Rampage users the hybrid screen is called Liso. The second order FM screen running in the Rampage RIP is called Segundo.

We spoke with a Swedish user of the Taffeta screen, Thomas Strand at Strands Tryckeri, whom Fujifilm asked to print our test forms. Strands have used the Taffeta screen now for some months and have had some interesting experiences. "An unexpected side effect is that we use less ink than before", says Thomas, "while the visual appearance shows a slightly better contrast and more vivid colours". He also says that: "Another characteristic of the Taffeta screen is that it's very stable, and it isn't affected even by quite considerable changes to the density levels. This means that the print quality can be kept at a high and consistent level during the whole print run. We only needed to adjust the grey balance after one test run, and then we knew how to adjust the prepress settings compared to when printing with conventional AM screens. We plan to use the Taffeta screen in a large proportion of our production." Strands uses a Fujifilm internal drum CTP device with violet laser, the Luxel V6 platesetter, together with the Fujifilm LPNV violet light sensitive plates.

Fujifilm also had our test form printed using the Co Res screen at Clausen Offset in Odense, Denmark. We spoke to Peter Dannemand, production manager at Clausen. "We have used the Co Res screen now for some five to six months, and the transition was easy. The print operators have not needed to change anything on press. What we appreciate the most is that any tendency towards [visible] rosettes is more or less gone, and the image details are much better. Also Co Res creates much less moiré in pictures containing fabrics and clothes. We use CoRes for about 75% of the jobs already, and I think this will increase."

We had hoped to include test prints from the Rampage Liso hybrid screen, which should have been handled by Fujifilm UK. Unfortunately, that test printing never took place, presumably because of IPEX. We did however talk to several users of the Rampage Liso hybrid screen, among



Thomas Strand at Strands Tryckeri, Sweden, one of the happy users of high frequency screens we spoke to. Strand increasingly uses the Fujifilm Taffeta screen in daily production.

▼ them Tom Coker at Communicorp Inc, in Columbus, USA. He said: “We had to print a job which already had been printed before in Germany with some kind of FM screen. We installed the Liso screen in our Rampage RIP, and after two test prints to check dot gain, grey balance etc, we had adjustments curves ready for the RIP. We noticed very soon that the contrast and vividness of the images had improved significantly. Since the press operators find that they get up to colour faster, they like the Liso screen. Highlight details are incredible and shadow details no longer plug up, so we find that we can put slightly more ink on the sheet. Overall the print quality has improved considerably. We also use the Segundo FM screen for some jobs, since the Liso can't avoid moiré entirely. Segundo is more critical to set up, but used for print with lots of fine detailed fabrics, like for example carpet samples, the result with Segundo is amazing.”

Global Graphics

Global Graphics doesn't sell any CTP device or RIP system to end customers. Instead its various technologies are integrated or embedded into OEM partners' products. You will find the Jaws and Harlequin RIP in many third party solutions, under their own brand names. Since Global Graphics is obliged not to reveal anything about partners' solutions, it can't confirm exactly how many screening technologies of the ones listed in this article are based to a smaller or greater degree on the Global Graphics technology (yes, we did ask). But Global Graphics is happy to reveal some of its customers/clients and on that list are Agfa, Esko, Kodak and Screen. One company missing on this list is Heidelberg, but Heidelberg makes no secret of the fact that its older FM screen, the Satin screen, is based on Global Graphics HDS (Harlequin Dispersed Screening) screening technology. Kodak openly admits that Staccato is also based on Global Graphics HDS, and so does Screen for its second order hybrid FM screen, RandotX.

Heidelberg

Heidelberg holds several patents for screening technologies, both from former Hell with the IS-screen (Irrational Screening), and what used to be Linotype, the HQS-screen (High Quality Screening). Since 2004 Heidelberg has also offered its customers a second order FM screen called Satin, based on the Global Graphics HDS. The first generation FM screen from Heidelberg is the Diamond Screen and at Ipex Heidelberg presented its new line of screen technologies, with both hybrid and second order screens. The hybrid screen is called Prinect Hybrid Screening, and is very similar to the Agfa Sublima, Esko Samba, Kodak Maxtone and Rampage Liso. Heidelberg uses the AM technology from the IS-Screening in the midtones, but with new screen angles.

Heidelberg used to have the black separation at a 105 degree angle, but has moved it to an angle of 52.5 degrees to provide better reproduction of greyscale objects. The screen angles for magenta and yellow have been moved accordingly. In the highlight and deep shadow areas the screen is switched to use an FM-like technology, using a method to thin out the dots and for which Heidelberg has a patent pending. The dots are re-▶

Yet another discovery, for us at least, was that dot gain doesn't need to be a bad thing. Several printers reported that they needed less ink while still being able to maintain good contrast and high densities. It sort of makes sense, when you think it through.

▼ moved in a random way as well as shaped in scrambled mode to avoid a grainy look in print. The size of the smallest dot can be user defined starting with a 2 x 2 exposure dot (at 2540 dpi) which corresponds to a 20 micron dot, as the smallest. The next available dot sizes are formed by 5, 6, 7 and 8 pixels, and the largest minimum dot size is 3 x 3 exposure dots, which is about 30 micron (at 2540 dpi), and again the dot shape is varied to avoid graininess. The Prinect Hybrid Screen can be set to a line frequency of up to 400 lpi.

Another new member of the screening family is the Prinect Stochastic Screening, a second order FM screen, using pure Heidelberg technology. Heidelberg describes the new way of creating midtones as making a “wormlike” pattern to avoid moiré.

Heidelberg will of course keep the Prinect AM Screening technology in the portfolio, with its many options for dot shapes. Heidelberg was finishing the beta period for its hybrid screen during our test, and unfortunately we could not have our test forms printed with the new screens. But we visited a printer who had participated in the beta stage, Color-Medienservice GmbH in München, Germany. Michael Grüll, prepress production manager at Color Medienservice, told us about his experiences using the new Prinect Hybrid Screening: “We have used the Satin FM screen quite a lot in our production, but our press operators find it a little cumbersome to switch between the settings needed for conventional AM screen and FM screening. When using the Prinect Hybrid Screening there’s no need to change anything, and the press operators say they come up to colour faster too. Both contrast and image details are enhanced with the hybrid screen compared to using AM screening, and there is much less tendency towards moiré. We don’t see any tendency towards grainy midtones, which is logical since here conventional AM technology is used. We use the 400 lpi screen without any problem, probably to some extent thanks to our Suprasetter 105, using thermal plates from Kodak Germany. We plan to use the hybrid screen in most of our production.”

Kodak

Kodak offers customers both hybrid screens and second order FM screens, as well as conventional AM screens. The hybrid screen is called Maxtone, and is similar to Agfa Sublima and other hybrid screens in that category. The screen that Kodak (and in particular the former Creo division) promotes the most is the second order FM screen Staccato, based on Global Graphic HDS. Kodak offer Staccato in several versions: 36 micron Staccato for newspapers, 25 micron Staccato for commercial web offset, 20 micron Staccato for commercial sheetfed offset and the 10 micron Staccato for “premium” applications. Kodak stress it’s necessary to use a very precise, high resolution CTP device to create a 10 micron screen, and recommend its Square Spot Technology as the best choice for this. At 10,000 dpi, a 10 micron dot is created using 4 x 4 exposure dots, creating a crisp and sharp screen dot. Using a 10 micron screen dot corresponds approximately to using a 600 lpi AM screen! Kodak suggests using a thermal CTP and its Excel plate for those small screen dots. ►



We didn't manage to persuade Heidelberg to print test samples in time for this test, but met with one of the beta testers. Michael Grull at Color Medienservice in Munich reports that he is very pleased with the Prinect Hybrid Screening so far. They plan to make it the default screen in most of their production.

▼ The test forms were printed at Metropolitan Fine Printers in Vancouver, Canada, and during the print run some slight moiré was discovered in some of the images in the Altona Test Suite. This was unexpected, since moiré shouldn't appear when using the 10 micron Staccato FM-screen. We have to admit that so far we had always noted moiré to some degree in the test form, and thought it unavoidable. Looking closely into the images in Photoshop we had to agree with Kodak that there was actually a slight tendency of moiré already in the original image, probably introduced by the scanner. This slight tendency came out using the high grade screen, but was surprisingly less noticeable in the prints made by Fujifilm, using the 20 micron Taffeta second order FM screen.

Kodak explains that finer FM screens resolve native moiré in the image more precisely, making the moiré more visible than with a more coarse screen. Backing off to 20 micron Staccato should have a similar impact. We conclude that it was only the Kodak 10 micron Staccato screen and the Fujifilm Taffeta screen that could reproduce the test forms more or less without any visible moiré, and they are both second order FM screens. Kodak has about 1500 active users of the Staccato screen worldwide, so it's a well-tested and robust screening technology.

Monotype

Like Global Graphics, Monotype offers screening technologies to its OEM partners, and with the Color Set Screening Kit it's possible to develop custom built screens for the RIP systems. It's possible to build hybrid screens combining AM and FM screen technologies with this toolkit, as well as different types of AM screens.

RIPit

RIPit started off as a RIP system vendor but has started to sell CTP devices as well. It offers a conventional hybrid screen called Perfectblend as an option to its Symphony RIP system. The midtones are created using Agfa Balanced Screens sold under licence, and the FM part is done using the Monotype Screening Kit.

Screen

Screen presented its new hybrid screen Spekta 2, a second order FM screen with some AM ingredients, at IPEX. Development work has often been about avoiding the grainy midtones that could occur with first generation FM screens. Screen has tried to avoid the problem in Spekta 2 by creating AM-like dots, but placing them randomly in an FM-like way. Under a loupe this looks like a wormlike pattern, but it's not discernable to the naked eye. The minimum dot size is 21 micron, made up of a 2 x 2 grid of exposure dots. Spekta 2 is just out of the beta test phase.

At the moment Screen customers are offered a range of conventional AM screens, and a hybrid screen called RandotX. This is based on Global Graphics HDS, so it's very similar to the 20 micron Kodak Staccato and Heidelberg Satin. The Spekta screen is a second order FM screen, similar to Spekta 2 in technology. Spekta can be used with two screen frequen- ▶



We spoke to several Rampage users, among them Tom Coker at Communicorp Inc, Columbus, USA. Communicorp use the Rampage Liso hybrid screen and have found that they obtain better contrast and colour gamut, while they can still somewhat reduce the ink amount.

cies, 300 and 400 lpi, while the Spekta 2 is initially only available for 350 lpi screening.

We have spoken to some printers who use the “old” Spekta, among them Fulmar in the UK. Mike Austin, technology manager, tells us that Fulmar use Spekta in about 25–30% of its production. The press operators don’t need to make any particular changes or adjustments on the press when changing between AM-screens and the Spekta hybrid screen.

We couldn’t talk to any printers about their experiences with the Spekta 2 screen, since the beta testing has been mainly done inhouse, but Screen made prints of our test forms. The colour images have amazing image details and virtually no moiré. However less satisfactory is that Spekta 2 showed an unexpected tendency towards graininess in the greyscale image in the test form, while doing an excellent job on the colour images. Screen explains that the original image has some “noise” in it, which we agree with. As Kodak also found with Staccato, for some reason this noise is also enhanced by the Spekta 2 screen in combination with slightly too high density, and using unadjusted standard ISO settings which assume AM screens.

The Test

Besides using our favourite test form, the Altona Test Suite, we asked participants to print a test image with lots of fabric, to be able to evaluate how well the hybrid screens and second order FM screens, which often use an AM-like technology in the midtones to avoid graininess, could avoid moiré. The vendors were free to choose for themselves what plate, CTP and screen size and screen ruling to use.

The control was a print on coated paper using a conventional AM screen at 175 lpi. In reality the test is limited to sheet fed offset printing and only one paper type, coated semi gloss. This doesn’t mean that the hybrid screens wouldn’t be of interest in newspaper production or flexo – they are, and very much so.

When evaluating the printed samples we looked especially for things like image details, whether highlights and shadow details were preserved or not, tendencies to moiré and finally how the screen worked on a greyscale image. In each category a mark from 1–10 was given, where 10 means excellent and 5 barely acceptable (see chart below).

Conclusions and comments

Several of our expectations and opinions about hybrid and FM screens were confirmed, but we hadn’t realised that there are so many different screening technologies that all are referred to as “hybrid”. There seem to be two major categories: one is closer to AM screening, and borrows to some extent from FM technology; the other has more in common with pure, or classical FM screens and borrows from the AM.

When evaluating the printed samples we looked especially for things like image details, whether highlights and shadow details were preserved or not, tendencies to moiré and finally how the screen worked on a greyscale image.



What both have in common is that they hold highlight dots and the deep shadow dots equally well, and produce very sharp and detailed images. Not all hybrid screens reduce or eliminate moiré equally well, and those that do so best are, unsurprisingly, more FM inclined. But with high screen frequency comes a definite reduction of moiré in all the tested hybrid screens. In our test it was the Fujifilm Taffeta and Kodak 10 micron Staccato that eliminated moiré almost completely.

Another conclusion is that it's possible to successfully produce FM screens using visible light CTP and plates, even though several manufacturers recommend thermal for this. Fujifilm, or rather its customer Strands Tryckeri, demonstrated this using its Luxel V6 CTP (using violet laser) and the new high resolution plate Fujifilm LPNV.

Yet another discovery, for us at least, was that dot gain doesn't need to be a bad thing. Several printers reported that they needed less ink while still being able to maintain good contrast and high densities. It sort of makes sense, when you think it through. With a high optical dot gain you need to hold back on the amount of ink, so you save ink. How much ink you actually save isn't fully clear, and not all vendors want to promote this feature too much, but the indications of possible ink savings are there.

A general comment is that especially the FM-type screens have a very stable appearance, despite fluctuations during the press run in ink density levels. For most press operators this is a good thing but it can also, oddly enough, become a problem. If the proofs don't properly match the printed result on a correctly set-up press, it will be difficult for the press operator to tweak the appearance on press, to match the proofs. The solution to this is of course to make sure beforehand that the proofs really match the final printed result, using the screen in question.

Our favourite feature with all the hybrid screens, be they AM or FM based, is that they all eliminate rosettes beautifully (yes, with hybrid screens they might still be there, but are so small you can't see them). We have never been convinced that rosettes should be a natural and inevitable part of printing technology, rather, they have been a necessary evil. With high frequency screens, images become at last photorealistic, reproduced with amazing detail fidelity.

– **Paul Lindström**

Results follow on the next page...

Advantages and disadvantages for AM, FM, and hybrid screens

	AM	FM	Hybrid
Rendering of fine details	-	+	+
Smooth flat tones	+	-	+
Dot gain	+	-	+
Screen introduced moiré	-	+	- *
Motif introduced moiré	-	+	+ *
Multicolour printing (cmyk + n colours)	-	+	-
Run length	+	-	+
Clipping in highlights	-	+	+
Rendering of midtones	+	-	+
Closing in shadow areas	-	+	+

* reduced, but not always eliminated entirely

Results from Visual Evaluation

Vendor	Screen	Details	Highlights	Flat Tones	Moiré	Greyscale	Total
Unnamed	Conv AM 175 lpi	8	9	10	7	9	43
Agfa	Sublima	10	10	10	9	10	49
Fujifilm	Taffeta	10	10	10	10	10	50
Fujifilm	CoRes	9	8	10	9	10	46
Kodak	Staccato	10	10	10	9+ *	10	49 *
Kodak	Maxtone	9	10	10	9	8	46
Screen	Spekta	10	10	10	9	8	47

* The original image was discovered to have a slight native moiré, and this might be what is picked up by the Kodak Staccato 10 micron screen.



Xerox walks the line

We were recently privileged to participate in Xerox's European Analysts briefing, where, apart from tempting us mercilessly to eat far too much far too often, Xerox shared some of its ideas and plans for the coming months. As one would expect, what was shared ranged from the zzzzz-y to the riveting, and of course the riveting stuff has to remain under wraps for the time being. What was more interesting were the hints whispering somewhere between the secrets and the zzzzz-y hohum.

Xerox Europe is present in 17 European countries and employs 12,000 of the company's 55,200 people. Xerox Europe's three business groups contributed \$4.3 billion of Xerox's \$15.7 billion 2005 revenues (income was \$978 million). First quarter 2006 corporate revenues were \$3.7 billion with lower gross margins at 40.2%; "lower than what we would like due to a lot of price pressure in the market" according to president Armando Zagalo de Lima. Armando describes the Q1 2006 corporate result (flat compared to Q1 2005), as "healthy but under expectations, I would say". Xerox Europe's figures aren't made public, but we estimate a \$1.013 billion contribution to the global revenue for the quarter. On the positive side revenues from colour are up 11% and debt is down by \$1.9 billion to a still dizzying \$7.7 billion and SAG (Sales, Administrative and General) costs are 26.6% of revenue. Armando concludes that "it's not an enormous blip ... we believe we can come back".

Whether that happens or not depends on the markets that use digital printing engines, loosely categorised as "office or general" and "professional or commercial print". In common with several of its competitors, Xerox has separate entities dealing with each, although the boundaries between the two are merging: Xerox's Production and Graphic Arts, and Global Services which serves both office and production applications.

Valentin Govaerts, Xerox Europe's avuncular senior VP for production and graphic arts doesn't share revenue information and is confident that Production is on track: "our strategy is there to stay ... it's a very nice strategy". His division serves over 10,000 production customers, including in-house and commercial sites. He recognises that the print business and its markets have changed and that close cooperation between Xerox Global Services and Production is crucial for Xerox's customers and the company's future market position, despite the inherent conflict between the two.

According to Valentin, Xerox estimates the digital printing market has a CAGR of 11% and by 2007 variable data volumes will be far higher than 30%. At Ipex Xerox signed contracts for over 65 presses, and 30% of leads were interested in workflow. There are 16 iGen3s placed in Europe for photo book printing. And? None of this sounds all conquering as far as ▶



Armando Zagalo de Lima, Corporate Vice President, Xerox Corporation and President, Xerox Europe

▼ commercial print is concerned and as sixty percent of Xerox's production revenue comes from corporate and government markets, there is clearly still much to be done in the traditional graphic arts. Valentin's view is that: "we more and more see the graphic arts [customers] as a sales force for Xerox", meaning the Premier Partner Network of Xerox customers, which are also the preferred suppliers for Global Services. Is this the starting point for developing XGS and Production synergies?

Xerox Global Services

Global Services contributed \$3.3 billion, around 23%, to 2005 corporate turnover and employs 15,000 people worldwide. It provides inhouse print management for companies which might otherwise outsource their business to Xerox customers. It is technology led, focused on large enterprises and niche applications, and employs over 4,000 people in Europe, responsible for 1,200 outsourcing contracts. The division recently signed another two service contracts worth \$53 million. The \$36 million, seven year deal with the University of Calgary and the \$17 million, four year contract with Intercontinental Hotels Group include enterprise-wide document management services plus advanced office and high-end production print technology. It all adds up to a lot of print, print that might otherwise have been placed in the commercial market.

The division partners with non-competitive organisations such as EDS, IBM Document Services and others, in order to gain reach into customers it doesn't otherwise have. These partners further enhance XGS's ability to compete with Xerox production customers. Acquisitions, new recruitment, skills and knowledge development, its priorities for 2006, will help XGS further extend its output management, possibly even to third party and outsourced print providers. What could this do to Xerox's relationship with production customers? Is that an image of swamps or heavy fog we see before us?

Inevitably, Production and Global Services divisions will have to cooperate to serve accounts which require support from both, and of course both sides are willing. Xerox recently introduced five new machines including a new mid-level digital production colour press, colour printers, digital copiers and multifunction products positioned for applications in both areas. The flexibility of these engines, and the range of uses they serve could soon put Xerox in the invidious position of competing with its own customers in a growing range of situations.

The incompatibility between Production and XGS is an operational time bomb putting in jeopardy Xerox's future as an independent supplier of print and information technologies. It's one that needs diffusing with utmost urgency. Cooperation, not competition with customers, is Xerox's blueprint for the future, and fortunately is not unprecedented. The Sumitomo Bank example is already well documented, but Xerox divisions have cooperated to support rather less glamorous projects, such as the project at Brewer Dolphin Securities.



Valentin Govaerts, Senior Vice President Xerox Europe, Graphic Arts Industry and European Integrated Marketing

Financial services company Brewer Dolphin needed to improve knowledge of their 150,000 clients. A web based client questionnaire and in print helped achieve this and ensure compliance with the FSA's new data requirements. The 32 page document was designed and printed by Hendi Group, a Xerox Premier Partner in the UK, but the service and data processing was managed by XGS. Hopefully such cooperations will be the way of Xerox's future.

Cooperations like this are critical for all players in the digital printing market, because office and production markets are no longer distinguishable on a purely technological basis. Digital presses produce inhouse printing, and digital printers are used for on demand commercial print. The differentiator is how different markets are served, the company's route to market, the underlying economics driving market strategies, and research and development investments. As the work with Brewer Dolphin and more famously DSI Talisman (see below) indicates, relationships with customers require printing technologists and data processing boffins to work more closely together. Indeed without close cooperation there is a high risk that ambitious variable data output projects are just so much digital detritus. It's about symbiosis, which requires a corporate structure to facilitate, not impede it. Unless it is resolved, the relationship between Xerox Global Services and Xerox Production has the potential to create a serious stalemate for the company.

Xerox was very wise to include case studies such as DSI Talisman and Brewer Dolphin at its Analysts Briefing. Case studies add a real life dimension to proceedings and stories of common interest, where project and technology developments are shared, can be more informative than just giving the techno low down. Good business isn't just about the technology, it's about the problem and how technology solves it and serves wider business needs. Business and application needs in turn help refine technologies, as is the case with DSI Talisman whose passionate Xerox love-fest has been well aired. Ninety eight percent of DSI's work is variable data print. The company aims to take its current £45 million turnover to £100 million within five years, and to have, rather cryptically "a finger in the pie in every corner". DSI is striving to achieve ISO 12647 and is Xerox's largest European commercial customer. According to DSI's managing director Dave Reynolds, Xerox "is starting to understand what we want from colour management, because colour management is good business practise so Xerox does take note of what we need".

It has to be said that colour management is not Xerox's strong point. In order to be taken seriously in the commercial market Xerox wants to get its colour management act together and understand the nature of the beast that is open market commercial print. PR puffery isn't enough.

Xerox, HP, Canon, Océ et al have all invested huge sums in developing the digital printing market, but for how long can digital press suppliers keep spending to educate and nurture their markets? How long will it be before the balance really shifts in their favour? It's hard to say, but

Five Alive

Those five new products:

The A4 and duplexing Docucolor 5000 fits between the 5252 and the 6060. Its engine is based on the 250, but running at 50 ppm on stocks up to 150 gsm at 2400 x 2400 dpi using a 32 beam laser. The 5000 has a duty cycle of 100,000 impressions per month and is priced between 5252 and 6060, so somewhere around \$140,000 (€112,000). The Docucolor 5000 is designed for printers producing from 30,000 to 150,000 impressions per month, for marketing brochures, posters, and direct mail.

The Xerox Phaser 7760 is a tabloid colour laser printer that prints on a wide range of media, up to 255 gsm. It includes Phaser Match 4.0 colour matching and calibration software for colour accurate proofing and has three quality modes: standard, a true 1200 dpi enhanced mode and a high quality photo mode, for press matching and on demand printing. The new machine prints up to 35 colour pages per minute and 45 black and white. Automatic duplex printing is standard and the Phaser 7760 has optional finishers for stacking, stapling and hole-punching, and a booklet maker.

The 7132, 7655 and 7665 for office and departmental markets are colour multi-function printers (MFPs) due for launch this summer. They have software tools to monitor, track and manage the colour prints, copies, faxes and scans done on a given machine. The tracking software monitors pages produced and generates a report that shows who is printing and copying, what and when. Could this mean the end of free photocopying for office workers?

clearly the secret is in going for the big IT projects, where print is making a healthy comeback. The Brewer Dolphin project is nothing when compared to the documentation and information dissemination requirements governments are mandating. Not for nothing does 60% percent of Xerox's Production division revenue come from government work: it's where there's budget and need. It all points to continued need for print, which is ultimately what Xerox and company are selling. Why they don't recognise that is a mystery though.

We came away from this meeting bursting with secrets, convinced that Ann Mulcahy and her merry band face some very thorny problems, and with two unanswered questions. The thorniest of problems is how to develop XGS and Production without fostering conflict in the field between the two. And those questions: "why aren't the leading press suppliers, including Heidelberg, Xerox et al selling print as a medium?" and "Why isn't Xerox getting into inkjet printing?" According to Ann Mulcahy and Armando Zagalo de Lima "Xerox is about listening", so hopefully we'll get an answer soon. At the Analyst's Briefing Armando also said that "the worst mistake a company can make is to lose its sense of reality". Companies the size of Xerox create their own realities, and only when it gets beyond its own reality will Xerox really be able to hear what the market is saying.

– Laurel Brunner



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