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Spindrift

News Focus • Opinion • Reviews
Techno-Babble • Attitude

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...Serving The Graphic Arts Industry Since April 2003

Colour **N.** *hue*, chromaticity, tone; brilliance, intensity, warmth, loudness; softness, deadness, dullness; coloration, livery: pigmentation, colouring *achromatism;* discoloration; tint, shade, nuance, cast, dye; tinge, patina; half-tone, half-light, mezzotint.

Management **Vb.** *manage*, organize; influence; handle, conduct, run, carry on; administer; supervise, superintend, oversee, caretake.

(from Roget's Thesaurus of English Words & Phrases)

Dear Reader,

Colour management has been a bit of a yawn of late with little of interest coming out of the ICC. The ICC may have been dozey but the developers have been busy busy. No less than four major colour management announcements have already been made in advance of Drupa. What's almost more interesting is the fact that one of these announcements comes from HP which is apparently under some pressure to take over the ICC. But that's just a rumour and we don't report rumours.

Colour has always been an important theme at Drupa but this year it looks like digital colour is going to take centre stage. We may be able to look back and say that this was the year that colour finally got demystified, turned into just another function. So far it's just so much theory and brain bashing pixelspeak, so we'll have to see.

In this issue we continue our series of features to prep you all for the German show. And as the pre-Drupa press conferences are now in full swing, our news section is fairly dense with who will show what and all that jazz. Let's face it, this spring is all about the technology and what it can do. What will be really interesting is to follow up on how users are implementing it in their businesses once the hype has died and reality sets in.

It's over to you!

Cheers from the Spindrift crew,

Laurel, Cecilia, Paul and Todd

In This Issue

All Clear for Take-off?

Chuck Weger, an American technical editor and consultant within the graphic arts industry, is said to have been the first person to use the term preflight in relation to print production. Originally, of course, the term refers to aviation and the checks a pilot makes before heading off for the runway. In the graphic arts it's about checking a document before sending it off for printing. And there's a wealth of software on the market which can carry out these checks automatically. In our series of articles prepping our readers with relevant techno-knowledge ahead of that giant trade show in May, the turn has come for the time and cost saving technology known as preflighting...

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The Repro House and the Platesetter

In idyllic Lytham St Anne's in Lancashire, repro house Laserscan last year decided to invest in a CTP. Says MD Alan Broomhead: "The decision to invest in a CTP was definitely customer driven. More and more of the printers we work with were putting in CTPs and did not want us to supply films anymore." We've visited Laserscan to find out more about the issues surrounding the decision to become a plate provider and how it has affected the business...

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News Focus

Heidelberg Haggard & Ailing

Heidelberg has presented its figures for the first nine months of the current year, and they are a pretty gruesome sight.

The company posted a net loss of €725 million on a turnover of €2,455 million. Having shed nearly 3200 jobs of late, Heidelberg also announced that the loss includes a special provision of €525 million for restructuring to involve the loss of a further 1000 jobs.

The outlook for 2004 anticipates sales dropping another 10 percent. Both incoming orders and the order backlog figures for Q3 are down from Q2 although sales are higher at €946 million versus €791 million for Q2. Group operating profit for the quarter was actually in the black at €3 million, but on a turnover of €946 million this is pretty feeble. And the year on year sales are down from the same period last year. In the first the nine months of 2003 operating profit was €48 million, but in the first nine months for 2004 (the year ends in March) the operating profit was a loss of €90 million.

These figures are truly dismal but what is particularly interesting about Heidelberg's results is the fact that the sheetfed division accounts for €2,059 million worth of the €2,766 million of group sales. After all this effort and time it is quite amazing that the gap is so vast between the traditional business and the brave new world Heidelberg so boldly entered. Digital printing contributed €171 million, web systems €255 million and postpress €281 million. Piffling, particularly if these markets were supposed to be Heidelberg's future.

Heidelberg's efficiency programme is underway and has already seen savings of €115 million with another €85 million due for the final quarter of the year. For the year ended 04/05 that figure is expected to be €280 million. By then all relocations of Kiel activities to Rochester and Wiesloch will be done and facilities in Muehlhausen and Slough will be completely closed.

The company's new focus is to get rid of the web systems business (presumably to Goss), "realignment of the digital division" (sounds confused or what?) and to concentrate on sheet fed plus the related value chain. Heidelberg also want to provide "competent support and consulting for Heidelberg's own products and products from first class partners". It sounds as if we shouldn't expect too much by way original development to come out of Heidelberg, but that deals aplenty will be made with third party developers, such as Screen which already supplies Heidelberg with hardware.

One day prior to announcing this quite stupendous loss, Heidelberg Chairman Bernard Schreier told to the international press what to expect from Heidelberg at Drupa. The highlights are the new Speedmaster 102 introduced in December and the Speedmaster 52 introduced last October. There will also be a new version of PrintReady, but Heidelberg are saying nothing about this until their press conference on 31st of March. This is an important date for Heidelberg and Herr Schreier stated rather enigmatically "I am optimistic that we will come to conclusions up to our fiscal year 03/04" adding that "the product range we have today will not be sufficient for the future". Well spotted.

Seybold Publications Relocating

Insofar as a publication is an address, the Seybold Report is to relocate to Foster City, California. Insofar as a publication is its people, the Seybold Report is to relocate to no man's land. Following the departure of Seybold's Craig Cline, the last remaining member of the team that took Seybold Seminars to the top of its industry, MediaLive, current custodians of the Seybold brand is closing the Seybold Publications office in Pennsylvania. All editorial, production and support staff will be made redundant as of the 31st of March. MediaLive is apparently hiring a Managing Editor to operate out of Foster City and continue publishing the newsletter. Way to go dudes!

As many Spindrift readers may know, our association with Seybold has been long and wonderful (mostly). Even the bits that weren't wonderful gave more than they took.

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All of us in this industry have had more from Seybold than could ever be given back. The Seybold Reports led the publishing industry through the digital minefields of phototypesetting, integrated text and graphics, the PC revolution, desktop publishing, digital printing, the Internet and everything in between. Mostly unseen Seybold had a hand in many of the major advances in the publishing and printing industries. Some of that was visible as Adobe and Apple will acknowledge, and rather more was not. Without the commitment, dedication and brilliance of a very special group of people this industry would look very different. Hats off to a great team, and their new beginnings.

Drupa Jaws Opening Wide

1635 exhibitors, occupying 160 025 m^2 of space versus 158 875 m^2 and 1943 exhibitors in 2000. 370,000 visitors are expected, 50/50 German/international versus 428,248 and 53/47 German/international in 2000. The show slogan is "Print Media: Prettier, Faster, More Reliable". And they're right. However projected numbers are lower than they should be if we are truly to convince the world that print is pretty. We need to do much more to convince print buyers, designers, and marketing people that they need to be at Drupa.

Fujifilm Electronic Imaging Restructuring

Fujifilm has announced plans to restructure its global business in order to better meet the demands of customers in the wake of digitisation. The company's revenues for the first half of its fiscal year were $11.32 billion, which compares favorably to the previous year, when the total income was $21 billion. The Graphic Systems division contributes 30 percent of Fujifilm's Information Solutions Segment income.

The company is to focus on its international business with expanded production facilities and strengthened research and development. In Tokyo the Graphic Systems division is to be reorganised in order to better support worldwide marketing and Fujifilm has purchased ten dealers in the US merging them with Fuji's existing US business to establish Enovation Graphic Systems Inc. to provide direct sales and customer support. Fujifilm has followed a similar strategy in Japan with the Fujifilm Graphic Systems Company, enhancing direct sales efforts to be more customer focused.

There is a new CTP plate production line in Beijing, China developed in cooperation with the Chinese Academy of Printing Technology and this will go live in April this year. In Greenwood South Carolina a second new plate production line will go live this coming October and another line is due to go live in the Netherlands in February 2005. Fujifilm is also enhancing its Japanese plate production facilities as part of the €200 million investment.

Fujifilm is introducing a new positive thermal plate (830nm infrared) the Brillia LH/PJ that is tougher and requires no post baking. This plate supports FM screening and a 10 micron dot and has a new double coating technology for improved on press durability of up to 200,000 impressions with normal inks.

A new processless phase change plate will also be available as a technology demonstration at Drupa. It images at 150 millijoules per square centimenter versus the 100mj per square centimeter of the LH-PI plate. It can be imaged on or off press, although different technologies are involved, and is rated for runs of 50,000. A Fujifilm executive stated that the new plate had acceptable printability and on-press developability. He added that the company is developing more CTP plates especially for UV applications.

The company is also making substantial R&D investment into colour management, workflow and screening. The new CMS is about controlling RGB better within the workflow as digital camera use continues to rise. It is based on Fujifilm's ColourKit plus new technologies. Fujifilm is leveraging its work in reversal film development and laboratory colour print technology in order to establish a "Digital Master Image" as a worldwide colour management standard. Digital RGB provides a multipurpose master for any type of output, ensuring colour consistency across devices with no clear colorimetric definites. Dynamic colour gamut mapping, image range adjustment and automatic sharpening information will be captured in supplementary image profiles so that the image can be optimised at the point of output to reflect scaling and output processes. Fujifilm's R&D teams are working to better merge photographic and printing technologies. They call it Fuji Image Intelligence and it focuses on RGB workflows.

Image Intelligence processes RGB images using Fujifilm's grey calibration quality stabilisation tool. The idea with Image Intelligence is to manage colour across everything in the workflow and at Drupa Fujifilm will have an RGB based colour network processing colour data from digital camera to press. Fujifilm's digital positive concept applies image intelligence at all stages in the workflow.

One aspect of Fujifilm's interest in colour management has to do with the company's developments in print on demand. Fujifilm is making a technology announcement in May for a print on demand RIP. It will be shown as part of an enhanced RIP configuration with two Xerox Docucolors (6060 and 2060) as a co-development with Fuji Xerox, plus a Horizon inline booklet maker to produce finished output. The RIP has automatic preflighting with a job property checking module plus support for PPML, automatic imposition and spot colour simulation. The POD RIP competes with Creo and EFI front ends but Fujifilm positions it as an integrated

technology working in a unified workflow front end system. The POD RIP will initially be available only in Japan but further announcements are expected "in due course" which probably means after Drupa. Going further with digital printing is something that Fujifilm has "under consideration". According to Fujifilm's press release, "Fujifilm will from now on be a supplier of high speed on demand print systems."

There are also new thermal and visible light developments in CTP due to be presented at Drupa, including new FM and hybrid screening technologies in addition to Co-Res. The new screening technology will work on both thermal and photopolymer plates. There will also be a new B2 4-up violet photopolymer platesetter at Drupa based on Fujifilm's existing violet head. Available as a manual, semi and automatic device the platesetter has an internal punch and supports eight resolutions. It has a single 120 plate cassette and is supplied with an entry level Adobe RIP. Output is 35 plates per hour at 1200 dpi or 20 pph at 2400 dpi. Fujifilm is also introducing a new low cost processor, and enhancing its B1 V and Vx9600 products. Improvements include a new lower cost single cassette model, a fully automatic option and various feature enhancements. Fujifilm's new FM screening is to be introduced for all violet engines.

Following recent announcements regarding the Rampage workflow system Fujifilm has also upgraded its Celebra RIP. Celebra Extreme PDF is based on a new Adobe core with PDF 1.5 support, EnFocus advanced Certified PDF support and Dynagram PDF impositioning. There are also some new JDF functions within Celebra for job input, imposition and press integration. Support for the new colour management and image intelligence technologies is to be added.

HP Launching New DesignJets, Colour MFD & a Top End Indigo

According to HP there are 18 trillion pages printed annually, and home and office printing account for 4 percent of them. This is a $20 billion industry and "the ecosystem of imaging" i e digital cameras, printers and publishing technologies are a $2 billion industry. Digital publishing is growing at a rate of 33 percent annually and HP has grand plans to capture as much of this as possible. Newspapers, magazines, and other professional print is HP's target two Drupas on. Indigo is right for forms, catalogues, brochures and packaging but HP is going beyond this "ten years from today" for as large a share of that 18 trillion pages as possible.

Several technologies will fuel the journey. HP is claiming a new colour management breakthrough "from desktop to printshop". CMYK+ is about providing "unsurpassed image quality" in digital publishing, with tools that are effective yet easy to use. This ICC compliant colour management is a RIP based technology that interfaces with commercial CMYK workflows. It provides professional CMYK quality on HP's inkjet, laser and liquid ink devices and it supports a wider output gamut than CMYK standards such as SWOP or Euroscale.

HP's technology preserves the black channel but also ensures that different primary colours are rendered accurately for RGB and CMYK workflows. Designed to get the most out of HP engines, this technology could also function with other devices. It uses adaptive transformation of the source colour gamut to make maximum use of the target device colour space, so that instead of printing the edge of a particular CMYK gamut, such as SWOP, the printer can render its own maximum gamut, without compromising the core gamut colours. CMYK+ covers all gamuts moving colours significantly when it can change them but without compromising colour relationships. HP is currently testing their technology and is "well along the way to getting the reference gamut accepted".

The new Designjet 30 and 130 series are high quality six colour 2400 dpi output devices suitable for proofing. Both lines include CMYK+ and are part of HP's move into providing photographic quality devices for professional photographers, prepress, and proofing. They differ in format. The 130 is for A1 and 30 for A3. The new $60,000 9850 MFP colour printer is a 50 page per minute device rated for 150 000 impressions per month. It is configured with an HP or EFI Fiery digital front end.

The Indigo 5000 is the first joint development between Indigo and HP and according to Vice President Bill McGlynn is "a bullet proof production machine that will set new price points". The 5000's paper handling is an HP development based on the same duplex principles as the 3000 but reengineered. The 5000 can print 4000 A4 colour pages per hour, uses the latest HP ElectroInk, has online finishing and is modular, supporting various input and output options (up to 5500 sheets in and 6000 out). It prints up to seven colours and costs a jawdropping $395,000. The 3050 will cost even less at $335,000. Available at the end of the year the Indigo 5000 is positioned for volumes of 700,000 A4 colour pages per month and the 3050 for 150,000 to 300,000 A4 pages per month. Of course HP is positioning the Indigo 5000 against the much more expensive iGen 3 and the Nexpress. Output quality looks on the HP samples to be better than either.

Dotrix to Spice Up Agfa's Life

Well, that's what Etienne van Damme, Manager of Business Development at Agfa said. In its first announcement since it became an Agfa child Dotrix has announced that it will present a new model of the.factory at Drupa. According to Dotrix ink sales growth in the US by 2008 will total $9 billion of which $1.65 billion will come from inkjet markets. So is that attractive to Agfa

or what? Dotrix is clearly an important accelerator to get Agfa back into digital printing. According to Etienne van Damme "so far we haven't invested in an ink manufacturing facility but we are looking at different opportunities".

Dotrix is launching a complete converting line at Drupa from jumbo roll to sheet cutter, and will implement Agfa's ApogeeX workflow system for packaging printing, ensuring compatibility across modules through JDF. The machine is positioned for industrial on demand customers who want to offer new services such as short or medium run products that are uneconomic on conventional presses.

Encad & Kodak First

The new Novajet 1000i is the first printer co-developed by Encad and Kodak. Encad has $34 billion of the $150.6 billion market for "information imaging" and expect this to rise with 1000i's uptake. It is apparently 97 percent faster than the HP 5500 and prints "photo quality" at 14 m^2 per hour. It features a new 640 nozzle head to print up to 1200 dpi with either dye or pigment inks and will be shown alongside the Nexpress on a shared stand at Drupa. The 60 inch model costs $16,995 and the 42 inch $11,995.

KPG Acquires RTI

KPG has acquired the graphic arts division of RTI including all monitor based proofing technologies, from entry level to colour critical screened proofing. KPG is heavily into research with some 300 research engineers (mostly software and colour scientists) and $300 million invested into CTP developments. 75% of KPG's revenue is covered by patent, with an average of two patents filed every week. The purchase of RTI boosts these strengths even further, as well as boosting KPG's patent library. The remainder of RTI will stick to healthcare imaging.

At Drupa KPG will launch a thermal non-process plate. Thermal Direct is designed to provide lower material costs, reduced work and faster processing. It is compatible with all major platesetters, and is imageable on and off press. The plate has no need for debris handling and supports run lengths of 75,000 although KPG has achieved over 100,000 in tests for newspapers. The plate will hold a 20 micron dot but 10 microns have been achieved in lab tests.

KPG is also working on a new thermal 512 channel dual head suited to on or off press imaging. The technology derives from the work KPG did on the Newsetter platesetter used in both commercial and newspaper devices. KPG is increasing its activities in the commercial sector.

A new module for Virtual Matchprint provides virtual proofing in the pressroom. ICC compliant Matchprint Virtual Presside runs on a G5 Mac with calibrated LCD monitor. Over time KPG will bring together Virtual Matchprint and its new RTI goodies.

Even more interesting is the move KPG is making into colour management. The new Colour Fidelity System automates colour critical data management from RGB capture to output. KPG's Colour Fidelity System has three cooperative modules. Module 1 is for configuring RGB images for specific output, module 2 is for colour matching on screen to multiple outputs and module 3 handles profile management and the rasterising. This technology is based on a Harlequin RIP.

The St Paul Pioneer Press newspaper in Minnesota has been using this technology to determine optimal gamut and tone mapping when converting SWOP to SNAP CMYK with a view to increased colour control and ink savings.

KPG will present a technology demo at Drupa of a flexo plate for packaging and is still assessing violet. According to CEO Jeff Jacobsen when pressed regarding KPG's introduction of violet technology "if you put it on the basis of the next couple of years I'd say there's a pretty good chance of that".

Screen's Drupa Attack

Screen holds the record for the highest number of Drupa product announcements so far. Screen will introduce several new technologies as well as new CTP machines for packaging and newspapers in addition to what is introduced at Drupa. Screen is watching developments in processless CTP, particularly for newspaper and flexo CTP, and introducing new machines this year "at venues appropriate to newspapers and flexo". And there's more. According to Screen's president Morino Tomitsugu "our plans are firmly fixed on new technologies for non-impact printing".

There will be eleven new products at Drupa (according to Nigel Tufnell bassist in the legendary Spinal Tap, eleven is so very much more than ten). Screen have three new CTP engines, numerous JDF modules and a new direct imaging press.

There will be a 30mW violet version of the B3 PlateRite Micra engine, imaging 23 plates per hour at 2400 dpi. Screen is also introducing the sixteen page PlateRite 16000. Based on a 512 channel GLV thermal head, it is available as either a semiautomatic or automatic device and can image 23 plates per hour at an unspecified resolution. It has inline punching and can have up to 400 plates online. Screen has shipped twelve of its large format Ultimas and has orders for fifteen more due to be shipped in the next six months.

The 16000 is positioned for new press buyers and for the large replacement VLF market where there are many slower non-automated and non-punching machines waiting to be upgraded. The 16000 will be available in September 2004 in Europe but earlier in Japan.

The Ultima 32000Z is another new addition. It is a high intensity twin head 32 page VLF thermal device that can image 46 plates of 800 x 1030 mm per hour at 2400 dpi. Screen has increased the energy intensity at the plate surface and increased the drum speed and can achieve output of fifteen plates per hour at top size. It will be available immediately after Drupa.

Trueflownet is positioned as a JDF environment rather than a product, because it is possible to incorporate any JDF compliant technologies into this environment. Underlying Trueflownet is Trueflow 3 which is now fully JDF compliant with a new user interface. This version links direct to MIS environments and has a range of new JDF enabled technologies. These include new imposition tools and an image quality management module based on artificial intelligence and colour management technologies derived from colour control software used on Screen's Cézanne scanner. RGB images come into the workflow with all colour repro details captured in JDF in a procedures file.

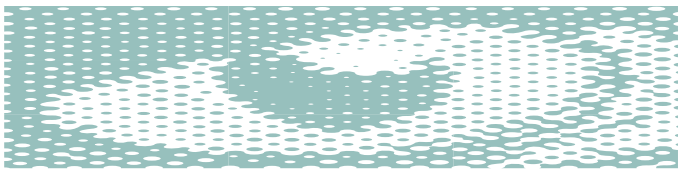
Trueflownet has seven JDF compliant additions besides image handling. TrueFlow Rite is a basic JDF workflow for users coming into JDF workflows for the first time. It comprises a RIP plus Screen's imposition module and the same user interface as TrueFlow 3. It is modular and can be extended with the Rite Control Production Manager which is based on a core JDF controller for managing system module integration including subsystems such as MIS or remote production systems, via the web.

Screen has also developed Rite Online, an online print ordering system built around a Global Graphics core, Rite Approve for remote web and browser based proofing and Rite Portal. This module is for creating Certified PDFs and includes automated preflighting, printing to a virtual printer and automatically loading the PDFs to remote servers. It also creates JDF job tickets for the host site. The final module in Screen's JDF suite is Rite Transfer which links to Rite Portal to provide a drag and drop mechanism for remote file delivery. It includes automatic preflighting and creates a dynamic link to the host site. This allows the printer to provide a hub with all PDF profiles and production specifications.

Screen has a new screening technology based on Global Graphics technology. Randot X supports 10–20 micron spot sizes and is designed for printers with strictly controlled environments.

The Truepress 344 is a B2 digital press with built in closed loop quality control. It scans complete page images every six sheets with an incorporated colour management system to correct deviations according to CIP3 values for both ink and the ink and water balance.

The press has a unique multilaser diode head to image a new polyester thermal plate technology on press. Rated for a run length of 10 000 the plate format is 340 x 470 mm. The imaging system has 96 laser diodes for a wide array of imaging and writes four plates (could they be from Mitsubishi?) at 2400 dpi in five minutes. Screen claim it is "the world's fastest press of its kind". The 344 prints 7000 sheets per hour, finishing a 500 sheet job in 15 minutes. Ultra fast job changeover means high return on investment because the press can handle a high number of jobs every day. The press uses traditional inks and papers and the target market is B2 and B1 printers and digital printers. Available at the end of the year, Screen positions the 344 for the on demand market.



Acrobites

(Something to get your teeth into)

LOM

Apart from Loads Of Money this little gem stands for Learning Object Metadata. The Metadata bit means the attributes needed to describe a learning object and a learning object is anything than can contribute to "technology supported learning" [does that include pencils? – Ed.]. According to LOM advocates, technology supported learning includes the obvious such as computer based training, interactive learning systems, distance and collaborative learning systems, plus books and people. A Learning Object is any type of digital content and anything that can work or interact with something else such as software, people and organisations. The goal of LOM standards is to help manage, locate and evaluate Learning Objects, using a minimal set of attributes.

The idea of LOM is to make it easier for everyone to find, check out, retrieve and use Learning Objects so that they can be combined and generally made useful. If there is some means of adding intelligence to the process of working with content, then this could be it. Of course it could also be that adding intelligence to the process of working with content, is what we ought to be doing in the first place.

For publishers this is an important standard in so far as it improves access to digital content. However it is probably a standard best left to those who care most about it, until they have completed their work.

IMT (Intelligent Mask Technology)

This is a clever technique developed jointly by Kodak and Encad. It is a print masking technique which lays down ink in a randomised pattern for each colour and print mode. The idea is to improve image quality on high speed ink jet printers. The technology is based on a proprietary ink tiling method whereby a screen is applied to the image files to determine which dots are laid down with each cyan, yellow, magenta or black print pass.

Spindocs

(Where the spinner gets spun!)

On the 26th of January Chairman of Heidelberg's Board Bernhard Schreier gave a long and extremely dull speech to a group of some one hundred international trade journalists assembled for Drupa's Media Week. He said:

"We have almost reached that time again. For over 50 years now Drupa has drawn the interest of our industry like a magnet. You too – I'm glad to say – are unlikely to remain untouched by the magic of the world's largest trade show in our sector of the market. For us, Heidelberg Druckmaschinen AG, Drupa has grown to be many things over the years. On the one hand it's an opportunity for the industry to present its prowess to a large international audience, on the other it is the industry get-together par excellence.

But Drupa was and is far more. This trade show has always reflected the industry's state-of-the-art. This has always been the place where the tracks are laid to the future, both technologically and economically speaking. In other words: this is where the industry decides where the train is headed. And whether we'll be on a slow train or a high-speed express.

And yet the upcoming Drupa can't be compared with any of its predecessors. That's no bad thing, even if, for a lot of reasons, we all remember the boom year of 2000 with fondness. In the meantime we've taken the new circumstances on board and have learned to live with them.

As things stand now, innovative stand-alone components are not the only focal point. The motto "Faster, Higher, Stronger" might be apt for the Olympic Games, but it is not apt for our industry, and especially not in the prevailing economic conditions."

And so it wends its sleepy way for another few hundred words. The whole speech was wonderfully banal, wistful and largely meaningless given that this was the Chairman of one of the most important companies in our industry.

On the 27th of January Heidelberg announced a net loss of €725 million for the nine months to December 2003, along with plans "leading to a further reduction of the workforce by up to 1000 employees worldwide". Schreier probably couldn't say much the day before these dire results were presented, but surely he could have used his opportunity with the press a little more effectively?

Letter From...Stockholm

Dear Friens,

Jag am schreving to du from freesy cold Stockholm where so dark is it det vi har no more hoppas for de coming of spring. Oh jar hur cold it iss, and so myket murky durky darkness det jar vill stay alla time in bed. Luckisom iss min bed everso coessyvarm. Vi har mycket good central heating in Sverige, not like det chillydampy noneffisient heating du har in England.

Ins min bed kan jar only read newspapers och Spindrift, and det is very nice for mej. But jar must komplainny till du, darfor jag haven't read myketmuch about newspapers lately. Jag jobbar in newspaper in advertaissing produktion hur i Stockholm och jar hur de hurdeygurdeygood time wid det alla days. But du schriveyschreivy not so mycket on newspapers now, only det boring platesetter stuff det jar find really, really bomsondull.

Wenn kan du schriveyschreivy mycket more on newspapers? Jag will read myketmore about advertaissing technologiess, and not det heaviley metalley platey stuff. Jag vill learney more over hur we kan yus mobileslovaservisses for journalisties and for advertaissies.

Apart von det boringstuff, jag like Spindrift myketmuch.

Ha de bra!

Ingelatingela Omströmsvikersson

The editor (or someone pretending to be replies):

Dear Ingelatingela,

Pull yourself together. Spring is definitely coming but so is Drupa and even if you don't care much about platesetters, plenty of other people do, so stop whining.

We will be writing more about newspapers this summer and particularly advertising technologies. So thanks for your support, and do cheer up!

Driftwood

(Useful stuff washin' in on our shores)

Longhorn

The next major version of Windows is supposed to be in beta in the summer. Code named Longhorn (a particularly hardy kind of cow popular with Texas cowboys) the new operating system is going to have a new programming model known as WinFX. Apart from the fact that this is very close to an expletive many users utter when using Windows, the FX initials don't seem to mean much.

The new programming model apparently supports Microsoft's .Net Framework programming model, so it will provide existing users with continuity in applications when the shift to Longhorn happens. Perhaps Microsoft has given Longhorn its name in the hope that the shift will be a stampede?

Other features include a structured database-driven filing system that goes by the quite uninspired name of WinFS. WinFS allows for dynamic search, recall and data sharing between devices and applications which according to Mr. Gates is necessary because "we have the information in silos [sic] – mail is separate from the files, and is separate from the web pages. The information has not been structured. All the operating system knows about files is that they are binary." Got it?

The new user interface is called Avalon, a curious choice. Avalon is the mythical kingdom where knights go to die and where King Arthur continues to hold court. Longhorn's Avalon will have a graphics subsystem that handles all content presentation. Microsoft is trying to encourage the adoption of a new mark-up language called Transaction Authority Markup Language, although the acronym is XAML. Microsoft's wonderful titled vice president of platforms, a Mr. Allchin (really) said that "With XAML you're able to separate the coding from the context". Quite what makes XAML special in this respect is a bit of a puzzler.

Microsoft has also added a web services architecture called Indigo to "build services in a dramatic way". Dramas aren't really what one wants from web services, or indeed any computing activities. Maybe dramas are good for service contracts and their associated revenues. We look forward to Longhorn's arrival with bated breath, not.

Say What?

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

As the attentive reader might have noticed we like poking fun at pretentious writing, of which there seems to be an endless supply. Well, we thought it was time to scrutinise the pickings closer to home. Here is a gem from one of Laurel's lengthier colour management pieces (written for the Seybold Report a while back – hence the American spellings):

"Photoshop spreads across the graphic arts landscape like a fertile loam, nourishing new and ever more wondrous creative possibilities for content providers. It fuels creative ambition and raises image quality expectations with every new release. The task of color management technology is to support rising image processing production demands, which are inevitably cranked up with each new Photoshop release. In response to this and perhaps partially too in anticipation of widespread disillusion with color managed workflows, traditional color techno-wizards have been hard

at work. Their common objective is to provide optimised digital images suitable for ever more ambitious retouching, compositing and reinvention."

Well clearly the sky is the limit, the Adobe sun shining through the life-giving rain, creating a wondrous rainbow of human creative endeavours...

Boomerangs

(Your feedback fed back)

Agfa have very kindly pointed out some corrections to the CTP Consumables article in Issue 8:

Metal plates are based on grained aluminium coated with UV or heat-sensitive layers, not photopolymers, so light hitting the plates causes chemical changes in its surface.

Silver halide plates have a hydrophilic (water loving) anodised aluminium base coated with a high speed emulsion, not a film speed one.

Because most (but not all) of these plates are only sensitive to thermal energy of more than 800 nm thermal plates can be handled in daylight.

To our description of ablation and phase change processless plates, should be added wash off processless plates. In such a plate the laser energy causes the coating to change its solubility.

Also the ThermoLite processless plate is designed for on press imaging with a suitably designed digital press. This wash off technology is sensitive to IR 830 nm light and uses the dampening water on press to loosen the nonprinting areas of the plate. Thermolite plates last for up to 100 000 impressions.

And Agfa's violet version of the photopolymer plate, the N91V, will be launched for commercial applications as well as newspapers.

And we've received a letter from Gavin Drake at Easypress:

Hi folks

I just wanted to be a pain and point out an inaccuracy in the latest issue of Spindrift.

Page 5, Driftwood, talks about XML and specifically DTDs versus XSL and XSLT. It states that XSL and XSLT are more flexible alternatives to DTDs. I think the writer has possibly got confused because the only alternative to DTDs are Schema (XSD). If you want to define structure in XML you have to use either DTDs or Schema otherwise your XML is not truly structured, just well-formed. It is true that Schema are more flexible and more powerful than DTDs in that they enable different data types to be defined. They are also more complex to work with and set up. However in the case of InDesign and QuarkXPress, the only data type available (in contrast to Excel) is plain text. Therefore it could be argued that DTDs are far more appropriate to these applications than Schema.

Just to clarify, Schema and DTDs are both ways of defining structure for XML files similar to the way you might define structure for a database. E.g. DTD and Schema specify that an XML file may contain certain data fields (elements) of a certain data type that can appear in a certain order and relate to each other in a certain way. Thereby systems and humans working with the XML know what content to expect in it.

In contrast, XSL is a means of transforming XML documents (either DTD or Scheme based). It is a complimentary technology to DTDs and Schemas and not an alternative. You can use XSL for any number of tasks for example to transform an XML document of one structure into a different structure (common when importing XML into a database). You could equally use XSL to transform XML into a format that isn't XML e.g. XML into HTML or structured ASCII. XSL can be used with both DTD and Schema based XML and again is a complimentary technology not an alternative.

Kind Regards,
Gavin

Paul responds:

Thanks for constructive feedback! After I wrote the piece, I've continued to try and sort out what's what, and what I found started to point in the direction you indicate.

XML and surrounding technologies are confusing for those of us that haven't really worked on real implementations, just tried to understand the technology through samples and tutorials, and through discussions with the real pros.

As a technical editor I can either stay away from everything that seems complicated, or try and learn more about it. I prefer the latter as long as I can. With the risk of being wrong sometimes, of course.

/Paul L

All clear for take-off?

Preflight your files for trouble free printing

Chuck Weger, an American technical editor and consultant within the graphic arts industry, is said to have been the first person to use the term preflight in relation to graphic arts production. Originally the term refers to aviation and the checks a pilot makes before heading off for the runway. For a document creator or designer the preflighting concept corresponds to the checks that need be made on a document before sending it off for printing. Many of these checks can be performed automatically using digital preflighting software.

However, even though document preflighting can be done using special software, it is still very useful to go through some kind of simple preflight checklist before sending a document. This involves manual as well as technically based procedures and will prevent some of the more obvious errors getting into the prepress department. It is far better to catch mistakes before they show up in the RIP or proofing stages, or even worse in print. By this time the cost of correction will be very much higher. The problem with such basic checking procedures is that once the checklist is put together and the workflow familiar, there may be a tendency to skip using them after a while. Some kind of objective, automatic and unavoidable checking of documents is needed and this is where software based preflighting tools come into the picture.

The Preflight Gatekeeper

Automated preflighting procedures using a computer and dedicated preflighting software sets up a neutral and objective gatekeeper. Because it is a stage in the workflow, preflighting can't easily be bypassed or forgotten and it doesn't get tired or error prone at the end of the working day. Of course using preflighting software still doesn't eliminate the need for highly developed skills on the part of creators or designers. It still takes good planning to create printable digital files and to avoid some of the more common errors in page composition. Despite automation tools prepress production still requires some insight into the complex world of high end print production, or at least an awareness of the production workflow and printing processes. But even in the most well managed workflows preflight processes can provide additional insurance to prevent unanticipated errors reaching the workflow. Regular and close contact with the printer, combined with manual and software based preflighting will generally ensure error free production.

Order! Order! Order!

Before starting a publishing project it's a good idea to think through the production chain, all the way from conception to distribution. What software will be used? What procedures will be followed? Where will content data come from? How will the content be printed? Any point where the slightest uncertainty or doubt creeps in, is the point at which to cross check the requirements, ideally with someone with sound experience of similar production requirements.

Many of the problems that occur in prepress can be avoided by establishing working practices to suit the project early in the design

Drupa Prep Series

Here continues our series of features to help you get up to speed on topical issues before packing off to Drupa in Düsseldorf. We'll publish two in each issue of Spindrift through April. The pieces are certain to be of interest even if you are not going to that great German Mai Fest. These articles, and others, will be published in our series of buyer's guides, coming out in time for the show. In this issue we take a bird's eye (or should that be cockpit?) view of preflighting technology, what it is, what it's good for and who supplies it. For the second article we visit a Lancashire repro house who has taken the CTP plunge, to find out what lay behind the decision and how it has worked out. (This ties in with the two CTP features about imaging technology and consumables published in issue 8.)

and production planning stages. Preflighting is about quality control and checking files for production errors. Different technologies are available to suit different types of production environments, but many common mistakes can easily be avoided well before a file gets into the production chain. Much of what is considered an early preflight, is in fact about working professionally and using the tools best suited to the production process.

Preflight Technology Basics

Naming Conventions

One of the simplest means of keeping track of files, versions, and their status is to set up and use consistent naming conventions. These can be based on dates and deadlines, customer codes, publication title, or anything as long as it can work without conflict or misunderstanding. In addition to a well organised filing system and cohesive naming conventions, it is useful to work with file extensions as well. Together these two are a simple first step.

Many of the problems that occur in prepress can be avoided by establishing working practices to suit the project early in the design and production planning stages. Preflighting is about quality control and checking files for production errors.

For those designers working in a Mac only environment the phenomenon of file extensions is almost unheard of, but file extensions are a simple means of getting the computer operating system to handle files efficiently. The extension to a file's name provides the operating system with information about the software used to create a document. On a Macintosh this information resides inside the file, but in Windows and Unix environments the file extension is necessary in order to direct the OS to the correct software for opening the file. Commonly used document types are doc, tif, jpg, eps and so on. When using Mac OS X (a Unix based OS), the user doesn't necessarily need to see or think about file extensions. However it may be wise to start adding them to your document files because it can simplify file processing, particularly in hybrid environments with Macs, PCs and NT or Unix servers.

The Mac OS no longer dominates graphic arts production the way it used to, so for the benefit of PC users it is helpful on the Mac OS platform to use the "add file extension" function when saving files for the first time. This can help avoid the situation where files appear not to open when copied from a CD to a Windows based server or workstation. Even with file extensions it can still be a little tricky to separate Illustrator native eps-files from other eps-files, but adding .ai after the file name (before the extension .eps) solves even that problem. This may seem overly cautious but it can prevent problems at a later stage in production, and will probably save additional proofing and preflighting cycles.

Working with images

Deciding how designers should work with RGB images during the page layout stage is an important thing to clarify early in the workflow design, as well as making sure the printer will be able to efficiently handle colour conversions to CMYK. Perhaps the printer prefers RGB images being converted to CMYK prior to placement on the page? If so, the designer should check what set-up parameters should be used for the colour conversions. Do the operators involved know how to do this correctly? Has the conversion process been tested with the printer? Set-up parameters depend on whether the printer uses positive or negative film imaging or goes direct to plate for CTP output with either positive or negative plates. Factors such as final dot gain on press are influenced by these kinds of production constraints so they cannot be overlooked.

If one uses ICC profiles and embeds them in the image, all images should of course use the same embedded profile, otherwise there will be serious problems when the final colour proofing is about to begin. In order to simplify things the printer may provide an ICC profile for the colour conversion, but this locks one into the specific environment for which the ICC profile was made. This isn't a problem if the file is destined for a single print process, but it could cause difficulties if the file is to be printed on several different presses. If this is the case, preflighting can rapidly turn into a seriously stressful process!

Missing images and illustrations

Most layout software uses a link to the high resolution images used in the file, leaving the high resolution version residing elsewhere on the system. On the page it looks as if the image is there, but in fact it is only a low resolution proxy version of the actual image. The final image, the one that will end up in print, must of course be the high resolution version, rather than the proxy file. Therefore it is crucially important to organise all high resolution images and illustrations so that the correct files are fully accessible throughout the production process.

Images with Insufficient Resolution

Missing images is bad enough, but at least they are pretty easy to spot. Images with insufficient resolution generally take a little more effort to identify. The generally accepted calculation for working out image resolution is to have twice the resolution of the screen frequency used when printing. Using a screen frequency of 150 lpi (lines per inch) means that a resolution of 300 ppi (pixels per inch) is required for the images. Most images downloaded directly from web pages often have a resolution of around only 72 ppi which is completely insufficient for printing. Also copyright rules apply to such images so it is seldom legal to use them in the first place, so get permission when requesting high resolution versions of image files.

Font handling

When digital files enter a prepress department the most common problems result from either missing fonts or images or both. Digital housekeeping helps considerably to keep fonts organised in a production system. Keeping them all on a server is a good idea and avoids having fonts cluttering up the system folder on individual computers. A server based tool can help make font management more efficient. Tools such as Extensis Suitcase Server not only keep track of the fonts used in a file, but can also be set up to check that all the fonts in circulation are legal. Also fonts with the same name but different publication dates can have different kerning information and character set-up and so cause an unexpected re-flow of the text at a later stage. Suitcase keeps everything in order, helping to simplify content proofing and solving preflighting problems before they occur.

If fonts are required locally for working off line, make sure the font set-up mimics that of the server's font set-up and nothing else. Keeping fonts organised has always been something of an endless battle, and Apple has not made things easier with Mac OS X. It is vital to learn how fonts are stored and organised in a particular operating system. Use a font tool for keeping track of which fonts are really used, as well as deleting duplicates and malfunctioning ones.

About the Buyer's Guide Series

These articles are part of the Buyer's Guide series due for publication in May. Over the next few months we will publish a series of articles to help readers understand business potentials and technology implications of CTP, JDF, Preflighting, Colour Management & Proofing, and Digital Printing. The Buyer's Guide series is an industry cooperation, with support from a variety of trade publishers and manufacturers.

Publishing Partners: AGI, CIP4, DRUPA, Il Poligrafico, Indian Printer & Publisher, Printing World, Seybold Publications and Spindrift.

The Buyer's Guide to Preflighting Sponsors: Agfa, Esko-Graphics, Enfocus.

Truetype fonts are known to sometimes cause problems in a PostScript based workflow, and should if possible be avoided. If the interesting looking Truetype font downloaded from the Internet simply has to be used, at least make some sort of a test with the printer to check whether the font passes through the RIP without any problems. Make this test sooner rather than later in the production schedule. It's one less variable to be resolved during preflighting. Many production errors can be avoided by sticking with Postscript Type 1 fonts in the first place, or working with the new generation Open Type fonts. Either will help prevent nasty surprises later in production.

Calculating the bleed

Making a mess of the bleed is a very common preflighting problem. Bleed refers to printing an image all the way to the outer edges of a page. Images printed with full bleed require an extra 3–4 millimetres added to their dimensions in order to avoid a gap around the image when it is printed and when the pages are finished. Most preflight software will pick up this error, but it is a good idea to make sure that designers know how to build it into their pages.

Use a proof

It may sound obvious but enclosing a printed proof with digital documents can save a considerable amount of trouble. Anything delivered on CD can be confirmed in this way and even in a totally digital workflow where files are delivered exclusively in an electronic environment, it is still a good idea to send a physical proof whenever possible. The printer can use this to check the output and as a guide for any potential prepress mishaps. Often the preparation of incoming files and the proof production can take a day or so, allowing enough time for delivery of hard copy proofs.

Other points

Basic preflighting is about getting work through production with the least amount of fuss. It is about minimising and resolving variables so that the file throughput is flawless. Simple checks such as making sure that CDs are readable, that monitors and proofers are correctly calibrated and that the correct ICC profiles are available, are all straightforward to do. Furthermore they can have a hugely beneficial effect on the workflow, reducing errors, building customer and operator confidence and identifying problems before the correction costs become too high. Preflighting is about quality assurance, so it is also a good idea to take advantage of the basic preflighting tools in XPress and InDesign. For high end production these should not be used in isolation.

Working with Preflighting Software

Proper and complete preflighting of native files, as well as PostScript and PDF files, requires dedicated software. This software may operate as a plug-in or extension to other software, nevertheless specialised application tools are vital for efficient workflow management and for workflow automation.

Most preflight software not only identifies production errors in the document, these tools also explain why something is considered an error and how to correct it. There is however room for improvement here as some of the explanations are quite short and tend to assume

familiarity with the PostScript programming language. We can expect the interactive help functions in preflighting software technologies to be continually enhanced over time. Correctly used, the current generation of preflighting software helps the designer to deliver error free fully printable documents.

There are plenty of packages available and there are business models where the preflighting and sending module is free for users, and paid for by the receiver which is normally the printer. To find out more about the software suppliers in this field, see the side bar.

The Role of the Internet

One of the biggest developments in the preflight business has been the use of the Internet as a basis for preflight checking. This is a trend that is certain to continue as prepress production becomes a more widely distributed business. Many companies are setting up central servers configured to receive and check files automatically. There are numerous developers who have developed such systems for publishers, including Markzware and Enfocus. Markzware designs and builds bespoke Web based preflight and quality assurance systems (Markzware FlightCheck Online) and Enfocus has set up a subscriptions based service.

The Enfocus CertifiedPDF.net website manages and synchronises PDF quality specifications between design and production processes. The primary objective is to ensure that document creators and receivers work with current PDF specifications for PDF creation, preflighting and subsequent production. The CertifiedPDF.net site stores all preflighting and production specifications necessary for checking and delivering production ready PDFs. Currently Certified PDF.net provides standard specifications such as PDF/X and file specifications from various industry associations, such as those working within the Ghent PDF Workgroup. Several publishers and printers publish their own specifications (or refer to public standards) on their personal page on CertifiedPDF.net. CertifiedPDF.net limits itself to publishing PDF specifications, and is therefore not a medium by which the files themselves are being transmitted from creator to receiver.

Quickcut follows a similar principal to that of Enfocus CertifiedPDF.net. Quickcut specialises in ad delivery for newspaper and magazine publishing, hosting a database of file specifications maintained by the participating publishers. The server provides a quality control reference check before allowing ad file delivery. Quickcut's server is set up for ad files, while Enfocus' Certified PDF.net and Markzware Flightcheck Online are designed for any kind of workflow. In both cases publishers are responsible for keeping the specifications up to date, so the host company is not responsible for file delivery or compliance.

PDF creators choose the specifications they use. A notification mechanism checks that the specifications are still up to date and notifies the user if there are changes. This type of web based preflighting provides a quality control hub for production, synchronising production specifications so that preflighting is done correctly when the file reaches the receiver's desktop and where the tools are available to correct any errors. The goal with web based preflighting and quality control systems is to avoid unnecessary file transmission, and to minimise delays in production.

Most preflight software not only identifies production errors in the document, these tools also explain why something is considered an error and how to correct it. There is however room for improvement here as some of the explanations are quite short and tend to assume familiarity with the PostScript programming language.

Preflighting used to be about correcting PostScript errors, but it has evolved in step with the prepress business. Today workflow automation demands automated quality control systems increasingly based on PDF. The difficulty with using PDF as a base format for prepress has been its breadth of application and the considerable flexibility with which PDF files can be configured. Much work has been done to overcome problems associated with the format's scope for abuse, most notably the development of the PDF-X specifications. But that's another story.

– Paul Lindström

The Players

Following is a brief summary of the technology developers and the products they offer. Most suppliers have made demo versions available on their web sites, providing a good opportunity for testing the various products to some extent before deciding if they fit into a particular workflow.

Agfa

Besides having preflight capacity in the ApogeeX RIP system Agfa offers a light version of ApogeeX called ApogeeX Create Pro, to help designers create printable PDFs and provide server based PDF creation. A printer that has bought Apogee Create can distribute client software to customers. The client tools contain the correct settings for preflighting so that the designer automatically creates documents that meet the printer's specifications for a certain type of print production. The software will also handle flattening of PDF 1.4/5 transparency, PDF export including PDF/X-1A and PDF/X for remote processing. The software can also be enhanced to support trapping and contract proofing.

Callas

This company has several options for preflighting. The server based solution is called ProcessPrepress and has a high degree of automation. Part of the Callas technology is used by Adobe in Acrobat 6 to provide basic preflighting tools.

Creo

Creo has built preflighting capabilities into the Prinergy, Brisque and Spire RIP systems. Creo offers the possibility for the designer to create PDFs according a printer's specifications. The software is called Synapse Prepare and has plug-ins to InDesign and Quark XPress. Through these plug-ins, PDF creation and the subsequent preflight steps can be managed directly from within the layout software. The preflighting profiles will be compliant to specified Enfocus Certified PDF and/or Adobe Distiller settings.

Cutting Edge Technologies

This is a Norwegian software company specialised in preflighting PostScript files with a high degree of automation. The company is not active in PDF preflighting.

Enfocus

Certified PDF technology is integrated in many of the well known RIP systems on the market, but Enfocus also has standalone software for the designer to use, such as Enfocus Instant PDF. For document receivers, Enfocus offers Enfocus PitStop Professional (an Adobe Acrobat plug-in) and PitStop Server, a standalone application allowing unattended preflighting through the use of hot folders. On www.CertifiedPDF.net printers and publishers can publish their latest and most accurate preflighting profiles so that customers can produce printable PDFs. While editing PDF files is to some extent possible using Enfocus or competing products, it is normally hard to keep track of those changes. With the Enfocus Certified PDF technology which is integrated into all of the company's products, it is possible to keep track of everything that has happened to a PDF file, including who did what, when and where. Thus it is possible to track any changes made and if necessary manually update at a later stage files created for example with InDesign or Quark XPress. Enfocus also publishes a PDF Guide. This explains the causes and possible remedies for all errors and warnings that might be generated. This is especially useful when controlling files with public specifications such as PDF/X and Ghent PDF Workgroup specifications.

Extensis

The Extensis preflighting software was recently sold to Printable, which uses Extensis technology in its own branded solution for online preflighting (PrintFlight). At the moment it is not entirely clear if Printable will continue to sell the stand alone Extensis software as Preflight Pro, or rename it.

Global Graphics

Preflighting tools are incorporated into the single user version of Jaws PDF Creator as well as into Jaws PDF Server. PDFs can be automatically created according to Enfocus Certify PDF profiles (Global Graphics and Enfocus cooperate on this technology). Owners of the Jaws PDF Server can also distribute personalised software clients to their customers.

Grafikhuset

This Danish repro house developed a preflighting technology for their own needs and then introduced it to the market. Primarily the software can perform colour conversion on the fly, as well as having the usual preflight software features.

Laidback Solutions

This Swedish software developer's preflighting software is coupled with a mechanism for adding administrative metadata to PDF files according to the new AdsML standard. This standard is designed for advertising file management within the newspaper industry.

Macula Datorkonsult

Another Swedish software development, this technology adds administrative metadata to the preflighted files. However it still only works with PostScript files.

Markzware

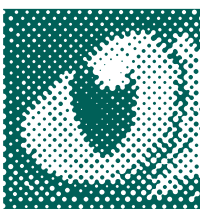
This is one of an elite band of industry veterans when it comes to preflight technology. The Markzware technology is also one of the few applications that can handle native files, created using such tools as InDesign, Quark XPress and Corel Draw. Markzware products offer a degree of automation that can be further extended with the use of Apple Script and Visual Basic. Markzware cooperates with other developers to offer integrated online solutions, and also offers its own standalone solution called Flightcheck Online.

OneVision

This is another veteran in the preflighting business. To describe OneVision's products exclusively as preflighting software isn't entirely fair as they are closer to RIP systems, with advanced editing and correction features. The price of this technology is consequently on a somewhat different level than most of the other programs mentioned here. OneVision provides a very powerful solution for the money, with lots of features.

Quite

A UK based software developer, Quite's preflighting technology offers some nice tricks, among them colour conversion on the fly.



CTP increases repro house business

Lancashire repro house Laserscan has been running their Screen PlateRite thermal computer-to-plate since October 2003. About a year earlier they upgraded their Screen Taiga workflow to the Trueflow system from the same supplier. With the purchase of the CTP a second Trueflow was installed.

"The decision to invest in a CTP was definitely customer driven", says Alan Broomhead, who runs Laserscan with partner Alan Fairhurst. "More and more of the printers we work with were putting in CTPs and did not want us to supply films anymore. Also a couple of our major customers put in brand new presses with automatic plate mounting, which meant they did not want conventional plates which had been punched manually, they wanted the register accuracy you get with CTP and inline punching."

So the decision to invest was made, in order to keep the business moving forward. But as Broomhead points out, although it was definitely the right one, it was also a tough one: "You don't buy just a platesetter. You also need a processor and perhaps an autoloader, which costs more than some small platesetters – we decided not to get one. And of course you have to have the front-end RIP and workstation to drive it, which can cost nearly as much as the platesetter if you want to drive a large amount of work."

Laserscan decided to use Fujifilm plates, which they buy directly, and their processor is also from Fuji. During the time when Laserscan was looking into what system to buy, several suppliers offered them deals for a combination of platesetter and plates, and some did the same for the processor and plates, but Laserscan decided not to go down that route:

"You end up paying somewhere", says Alan Fairhurst. "So we decided we might as well buy the equipment and then get the plates as competitively as we could. We estimated how many plates we would use in a year, and calculated that in the end we would pay a lot more if we had gone for a combined deal. Also, we wanted to base our decision purely on quality; to get the best platesetter, the best plates, the best workflow. Once you enter a deal you're to some extent controlled by the supplier."

Since Laserscan supplies plates to a number of printers, one of the features that they were looking for in a CTP system was flexibility in punching. In the case of the PlateRite it is automatically adjustable, and Laserscan has it set for Heidelberg and Komori presses in formats A2 and B2 (maximum size), which are the two basic types; Mitsubishi uses the same standard as Heidelberg in their presses. In the main, Laserscan outputs 3–4 different plate sizes. Alan Broomhead explains why the automatic punching is so important: "To give you an example; we have one competitor, a printer, who has an older platesetter which punches offline. We can sell plates at the same price, but we have a state of the art platesetter which punches online. It's also thermal and the dot accuracy combined with the register accuracy, thanks to the automatic punching, gives us a quality advantage."

Company:
Laserscan, Lytham, Lancashire, UK

Type of work:
A repro house with a variety of customers in need of high quality colour work, ad agencies as well as direct customers. End products are plates, film and the occasional Outline PDF-file ready for output on a CTP.

Equipment:
A Screen PlateRite 4300 thermal CTP (with Fujifilm Brillia LH-PI positive thermal plates), run on a Screen Trueflow digital workflow (with Screen Spekta hybrid screening as an option).

Time of installation:
September 2003

Top advice:
"Do not buy your digital workflow at the same time as the platesetter – the transition to CTP should be problem free as long as you have previous filmsetting experience." Alan Broomhead, Partner.

"The decision to invest in a CTP was definitely customer driven. More and more of the printers we work with were putting in CTPs and did not want us to supply films anymore."

– Alan Broomhead

Laserscan never really considered buying a visible light CTP, as Broomhead explains: "Thermal has two main advantages, as we see it. Firstly, it produces the highest quality plates from a dot reproduction point of view, which of course is crucial for us in supplying repro work of the highest quality. Also thermal CTPs are daylight operated, which meant we could put it in the middle of our main room without needing to organise a yellow or red light darkroom."

Another factor in choosing thermal was the possibility of producing plates with stochastic screening, or, in this case, Laserscan's newly acquired Spekta hybrid screening from Screen. Says Fairhurst: "We haven't really started using it on a larger scale, but we have one customer who prints fabrics, which frequently causes problems with moiré, so we thought they could benefit from it. It has worked well in the test runs we have done. And, of course, thermal CTP was a necessity in order to produce these plates."

Both Broomhead and Fairhurst stress the importance of the workflow and RIP in order to take full advantage of the CTP. Says Broomhead: "With a high-end workflow you get not only speed, but also tremendous flexibility, in that the RIP can handle all sorts of file formats. We've been sent jobs that others have not been able to process, and we've managed to output them. But the most important advantage is that we get data integrity throughout the workflow, because the system uses the ROOM (RIP Once Output Many) concept. This means that once a job is RIPped in the system, it remains exactly the same whether it is output to disc, plate, film, proofer or as an Outline PDF. This is so crucial, particularly for a stand alone repro house like ourselves, with customers all over the country and considerable costs involved in any reprints due to RIPping inconsistencies."

Laserscan uses an Epson 1000 inkjet printer to output digital proofs, which are now used for all but one customer. "We use our ColorArt film based proofer for one film customer for whom it is vital that any moiré patterns are discovered, which of course you can't totally guarantee with a digital proof," says Broomhead. "But thanks to the data integrity of our workflow, digital proofs are good enough for the vast majority of customers and jobs. This is something which has improved beyond recognition over the last two or three years. It's still not perfect, but to get a really perfect proof, you have to run it on the press anyway."

Laserscan had predicted producing about 600 plates a month on the CTP system, but current throughput runs at over 1000. They estimate that about 70 percent of the work results in plates, less than five percent in PDFs (for printers with CTPs of their own), and the rest ends up on film. "A lot of the printers are kicking out their plate making equipment and have bought CTPs of their own. Consequently they don't want us to supply film anymore; they can't turn these into plates," says Broomhead. "So now we send them Outline PDFs instead, and I suspect that might increase a little bit, although of course we'd prefer to supply them with plates. Over time that might happen."

Alan Broomhead brings up two additional points to bear in mind when considering a CTP. The first is that the chemistry is not as stable as it is in a filmsetter, it is more sensitive. Laserscan changes the chemistry and cleans the processor every two weeks. The other point is that, whereas the filmsetter is frequently left to run overnight, the CTP requires a degree of operator supervision, unless you get an autoloader: "We can

"We decided not to go for a combined platesetter-plate deal. You end up paying somewhere, so we decided we might as well buy the equipment and then get the plates as competitively as we could. We estimated how many plates we would use in a year, and calculated that in the end we would pay a lot more if we had gone for a combined deal."

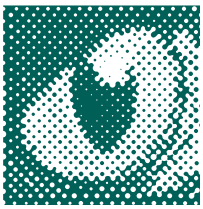
– Alan Fairhurst

Alan Broomhead at reprohouse Laserscan says the transition to CTP has run smoothly: "We thought we might have problems with plates getting scratched and that we'd have to replace a lot, but of the 4500 we've run so far, we've only had one scratched. And we've not had a single print failure – i e no returned plates from any printer."

programme the filmsetter to run rolls of films overnight in all different formats. With the CTP we'd have to have a multi-autoloader in order to pre-programme several formats and of course remove the paper sheets between the plates. We would still be apprehensive about leaving it running overnight; the metal crashing doesn't bear thinking about."

Laserscan is happy with the transition to CTP, which has gone smoothly thanks to the digital workflow already being in place and the skill and experience of the workforce. And any worries about supplying a new product – plates – to customers are gone: "We thought we might have problems with plates getting scratched and that we'd have to replace a lot, but of the 4500 we've run so far, we've only had one scratched. And we've not had a single print failure – i e no returned plates from any printer."

– Cecilia Campbell



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