



# Spindrift

News Focus • Opinion • Reviews  
Techno-Babble • Attitude

Volume 1, Number 10  
16th March, 2004

...Serving The Graphic Arts Industry Since April 2003

**subscribe** • **v** arrange to receive something, especially a periodical, regularly by paying in advance.

**loyal** • **adj** showing firm and constant support or allegiance to a person or institution.

(from the Concise Oxford English Dictionary)

## Dear Reader,

Here we are, issue number 10 and the conclusion of Spindrift's first year of publication. A year ago we stated that Spindrift should be "the graphic arts newsletter that aims to get to the point under a banner of expertise, relevance and irreverence." We hope you agree we've lived up to the promise and that you appreciate reading the content as much as we've enjoyed producing it. We have a great group of loyal subscribers and we sincerely appreciate your support. However, we frequently get comments on Spindrift from people who don't subscribe. Strange that. Is this a good thing or a not so good thing?

Last week, after a press conference, one such nonsubscriber asked Laurel whether her involvement in the printing and publishing industry was "a bit of a hobby?". Seriously. (This is a woman who worked at Seybold Publications when PageMaker was barely a twinkle in Paul Brainerd's eye). Well, what would you have said? It was tempting to ask this particular product manager if the engineers back at home base were also hobbyists (or worse). It was awfully tempting to point out that much technical development is either redundant or locks customers into a fixed and generally limited set of choices. But that wouldn't have been nice.

When development projects turn into product, when ideas turn into realities and when we benefit from some craziness, is what publishing is all about. Fortunately most people appreciate that printing and publishing is about communicating all of it, even the crazy stuff whatever industry or field it comes from. Printing and publishing shape perception and knowledge. Spindrift and the rest of the graphic arts trade press is about how the specifics of printing and publishing technologies can help do it better. Nothing more, nothing less.

So we hope we can count on your support in the coming years. And as for hobbies, well several spring to mind and all of them are far more interesting than prepress! Enjoy the read!

Cheers from the Spindrift crew,

**Laurel, Cecilia, Paul and Todd**



## In This Issue

### *Controlling the Colour*

These days colour management is available to everyone. Writes Laurel Brunner: "Some tools such as Photoshop create excellent colour files and some of them, like PowerPoint, do not. Graphics professionals still have to cope with the results which may be why colour management is gaining attention, albeit for the wrong reasons! Despite the horror stories, working with colour data doesn't need to hurt (much) and managing colour efficiently can seriously reduce production costs and improve throughput." Find out what colour management can do for you, and how to begin tackling it. Then Laurel opens the Drupa colour goody bag and takes a peek...

see page 10

### *JDF as it was intended*

Most of the JDF trumpeting comes from the vendor camp, at least that's the perception you get reading the trade press. Of course it is still early days for this potentially revolutionary technology, but there are already users out there who are implementing JDF to win the battle for business. Laurel Brunner has spoken to one of them: "Wyndeham Heron is one of the UK's largest magazine printers, receiving between fortyfive and fifty thousand PDFs and producing ten thousand digital printing plates per month. Unsurprisingly the company's manufacturing process is fully digital and highly automated, but for Wyndeham Heron there is only one way to take its production model even further: JDF, the Job Definition Format." Find out more...

see page 14

## Regular Columns

<i>News Focus</i>	Page 2
<i>Acrobites</i>	Page 7
<i>Spindocs</i>	Page 7
<i>Letter From...</i>	Page 7
<i>Driftwood</i>	Page 8
<i>Say What?</i>	Page 8
<i>Boomerangs</i>	Page 9

## News Focus

### *The deal is done – Heidelberg off-loads two out of three printing segments*

As far as printing presses go, Heidelberg once again will equal sheetfed offset. In November of last year the company announced that it was going through a “process of realignment”, and was looking at focusing on its core business. Since then we’ve been waiting to hear pretty much exactly what was announced on March 8. Heidelberg will be “handing over” its Digital Division to Eastman Kodak Co (with which H has the Nexpress joint venture), and it will be “transferring” its Web Offset division to Goss International. We assume the reason the word “sell” is used to describe neither deal is that not much money will be changing hands, at least not at first. In fact Eastman Kodak will not be paying any cash at all at closing for the business being acquired. Instead the company will be making periodic payments to Heidelberg over a two year period, if certain sales goals are met. If all sales goals are met during the next two years ending December 31 2005, Kodak will pay a maximum of US\$150 million in cash. As far as the Web Offset deal goes, no financial details of the agreement were disclosed. However, it was announced that Heidelberg will become a new shareholder at Goss International, holding just below 20% of the shares. It is possible that Heidelberg has actually had to pay for these shares in order to off-load a loss-making division, but that’s just our speculation.

The Kodak deal includes all Heidelberg’s digital print activities: Heidelberg’s Digital b/w business (HDI LLC., Rochester, USA), its 50 percent share in the Heidelberg/Eastman Kodak Co. joint venture (Nexpress Solutions LLC., Rochester) and its 100 percent share of Nexpress GmbH in Kiel, Germany. About 2000 people work within Heidelberg’s digital print business worldwide. It is not clear what will happen to them. The Digital Division accounted for about six percent (€240 million) of Heidelberg’s total sales in 2002/03.

The Goss deal includes Heidelberg’s Commercial Web and Newspaper presses and its Web Finishing business in the US. The 2100 employees at Heidelberg Web’s sites in France, the Netherlands and the US will be transferred to Goss International. The Web Division accounted for about ten percent (€430 million) of Heidelberg’s total sales in 2002/03.

Neither deal is yet completed; the companies are still awaiting approvals from antitrust organisations among other things.

### *HumanEyes: Bold New Venture, Bold Old Names*

Benny Landa and Yoav Chelouche’s latest venture is Human Eyes, a technology for creating true three dimensional photography using digital cameras and a digital printing engine. The technology was developed at the Hebrew University in Israel and can turn any digital image into a 3D picture for everything from laptops and mobile phones to posters and billboards.

The technology generates lenticular (using lenses) stereoscopic images that appear differently depending on the position of the viewer. The conventional method relies on special cameras or moving a camera on a rail to get lots of shots. Scanning a scene may work but it is slow and tedious. Human Eyes’ technology uses motion analysis algorithms to reconstruct camera motion parameters between two image frames. It combines 3D stereo and panorama imaging to create a 3D image that can be printed. The digital image can be printed at multiple sizes and depth effects although there is obviously a trade-off between resolution and range.

### *Creo’s Purple Haze?*

The new Creo Magnus VLF engine is a violet device. Really, it is. This is however only on the outside, inside it is still resolutely thermal.

The Magnus is according to Creo “the fastest fully automated VLF device on the market”. It has a larger drum (1600 x 2108 mm) and images fifteen 2050 x 1510 mm plates per hour at 2400 dpi. The Magnus VLF engine is a complete redesign for more productivity, with a larger

### **Spindrift**

ISSN 1741-9859

A very special newsletter for Graphic Arts, Prepress, Printing & Publishing Professionals, published monthly (sort of) by:

**Digital Dots Ltd**  
**The Clock Tower • Southover • Spring Lane**  
**Burwash • East Sussex • TN19 7JB • UK**  
**Tel: (44) (0)1435 883565**

#### **Subscriptions:**

Spindrift is a digital only publication, distributed in Adobe .pdf format. A ten issue subscription (our version of a year) costs €50 and can be obtained by going to [www.digitaldots.org](http://www.digitaldots.org) and subscribing. We strongly suggest doing this as it is the only way to legally obtain this publication and we know you all want to be legal, especially at this sort of price. Discount multiple subs are available. If you’re undecided and require some high-powered sales encouragement, ring Laurel at the number above.

**Publisher** – Laurel Brunner – [lb@digitaldots.org](mailto:lb@digitaldots.org)  
**Editor-In-Chief** – Cecilia Campbell – [cc@digitaldots.org](mailto:cc@digitaldots.org)  
**Technical Editor** – Paul Lindström – [paul.lindstrom@digitaldots.org](mailto:paul.lindstrom@digitaldots.org)  
**Production/Web** – Todd Brunner – [tb@digitaldots.org](mailto:tb@digitaldots.org)

**Contributors:** Mark M. Dotson

format, a smaller footprint (barely!), improved plate handling options and different levels of automation. It has its origins in the VLF Trendsetter but it is a major platform change for Creo. The Magnus has new higher power heads, dual plate loading, faster electronics, portrait plate registration and imaging. The Magnus images one metre a minute at 2400 dpi, but still has no punching unit.

There are three modular and upgradeable models: the Magnus VLF Manual, the Magnus VLF continuous load which adds stacked load and unload tables, and a multicassette unit that increases plate capacity to 75 plates. Creo has beta tested this technology since 10/02 and the first units were installed last year in the US. Since then the devices have imaged over 80,000 plates including KPG Gold, Creo PTP, Agfa and other plates. The first European installations are due in April.

#### Entry level workflow

Particularly interesting is Creo's new Prinergy Evo an entry level workflow system that costs only €8000, and lacks only the database. Based on PDF and JDF Evo is an idiot proof workflow at its best. It connects to all Creo engines including proofers and third party proofing devices. It even has automated error reporting to Creo for online troubleshooting and fixing of errors. Evo is suitable for entry level commercial and packaging printers or as a complementary technology for newspapers working with Synapse News Manager. This is a new PDF workflow Creo is introducing for newspapers at Drupa that includes an edition planner, a database server and tools for production processing monitoring. Evo has almost completed beta testing and is due for release this month. The official launch and complete language support will be at Drupa.

Creo is expanding its commitment to plate manufacture with the acquisition of the Spectratech plant in the US. The plant will produce negative thermal long run plates and newspaper thermal plates, doubling Creo's plate capacity and expanding its plate range. According to Creo "30% of worldwide plate demand can be satisfied by the capacity Creo now has" but Creo won't say what this means in terms of annual square metres. The same spokesman confirmed that processless is part of Creo's future but gave no specific details. Creo's PTP plate now has 200 users worldwide.

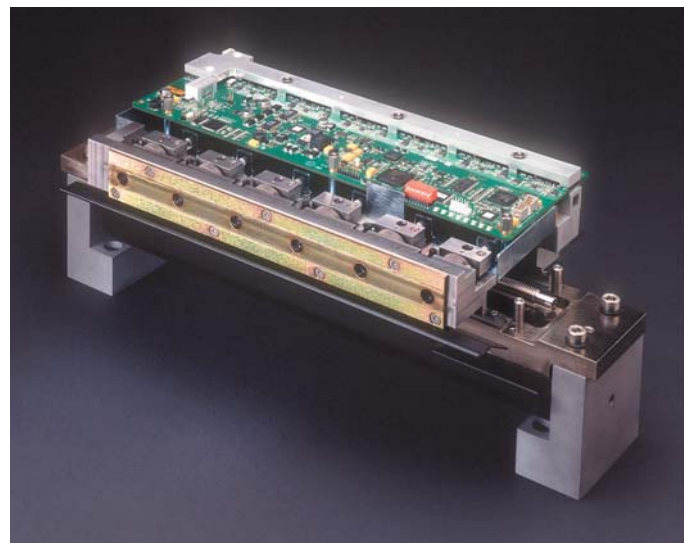
Creo also announced an expanded partnership with Xerox for Creo to sell Xerox equipment (Docucolor 3535, 5252, 6060) in North America to commercial printers. The arrangement may extend to a cooperation for driving the iGen3 with Prinergy and Creo's Spire. The Spire technology is driving a growing range of engines including new Xerox devices. A hybrid Prinergy workflow puts a Freeflow module into a Prinergy workstation, for driving either offset or digital presses.

New screening technologies and the Spotless colour converter will also be on show at Drupa. For more information on this and other colour management news from Creo, please read the colour management feature in this issue.

Creo is entering the gravure market through an arrangement with Italian Acigraf. Creo is developing imaging technology for gravure, to image four cylinders per hour and based on 3200 dpi version of the Squarespot head. In beta testing at ICR Milan, RR Donnelley and others the Exactus technology is expected to be available at year end.

#### Presstek Pyrotechnics

At Drupa Presstek is introducing its new Profire Excel fourth generation imaging head. ProFire is used on the Ryobi presses (sold OEM by Heidelberg and KPG) and will support stochastic screening and new quality levels. The new technology images a 16 micron spot size, for 300 linescreens and Presstek is working with prepress vendors to support any digital data format. Unlike the nine boards used in previous generations of ProFire, ProFire Excel has everything integrated into a single unit. According to Presstek it is more reliable and its lower cost diodes have twice the life of previous ones.



Presstek will launch its fourth generation Profire Excel imaging head.

#### Esco-Graphics Final Blocks in Place

Esco-Graphics is now wholly owned by Kirkby which has €1.5 billion in assets and has just approved Esco-Graphics's five year plan. One of five such investments for the Kirkby fund, Esco-Graphics' 2003 net sales were €142 million, 12% less than '02, but moving out of newspaper and currency fluctuations led to a 4.5% improvement in gross margins. Esco-Graphics employs 1000 people of whom 17% are in R&D and 33% in customer service. ▶

▼ Esko-Graphics has developed a new workflow environment called Scope. It is modular, extensible and comprises a suite of “smart, expandable tools” to be relevant across all industry segments from print buyer to distribution except newspapers. At Scope’s core is PDF with XMP support for data exchange, support for structured data with a gaggle of standards that we’ve never heard of such as ARD, CFF2 and IGES (actually we became curious and did some digging – see Acrobites), as well as the more familiar JDF and XML. Scope has



Esko-Graphic's PlateDriver Compact is a 4-up device internal drum red diode device that images 20 pph at 2540 dpi.

plugin technologies to Illustrator and Photoshop, and is a sort of universal digital space for prepress production. Scope components at Drupa include Groovy screens and FlexoPerfection. Groovy Screens adds grooves (line screens) to get higher density in solids and shadows. A new screen manager allows users to build their own screens for a given output combining Groovy Screens and Samba Flex for stochastic in the highlights, and using Groovy Screens to optimise densities in different parts of an image. FlexoPerfection is a post RIP editor for one bit TIFF files with various features for flexo printing.

FlowDrive 6 will be fully JDF enabled and previewed at Drupa and there are several new platesetters coming from Esko-Graphics, plus one engine OEM'ed from Highwater. The PlateDriver Compact is a 4-up device that images 20 pph at 2540 dpi. This internal drum red diode device will cost less than €70,000.

The PlateDrive 6 Semi outputs up to 680 x 930 mm plates at 1200, 1270, 1800, 2400, 2540 and 3000 dpi at 24 pph (at 2540 dpi). It is a semi autoloading machine loading two plates and auto unloading and processing automatically with five to twelve optional punch tools. The PlateDrive 6 Auto is the automatic version of this, with five plate trays for holding up to one hundred plates each, enough for up to twenty hours unattended imaging. These engines can be upgraded from a 36,000 to a 55,000 rpm spinner motor, upping throughput to 32 pph 4-up at 2540 dpi. It can also be configured for 8-up (800 x 1075 mm) and with more punch tools.

The DPX 4 CTP engine for polyester plates was shown at Igas and replaces the DotMate 7500. Esko-Graphics has installed over 2000 polyester CTP engines and estimates polyester plate growth at 9.6% per annum. The DPX 4 images 680 x 750 mm plates at 1200 to 3000 dpi, imaging 27 pph at 2540 dpi. It will cost less than €60,000. There will be other new devices at Drupa for imaging UV and polyester, and an arrangement with Basysprint seems likely. Esko-Graphics is also introducing a new optical system for its flexo device. The CDI Advance will be shown at Drupa.

### *RTI is everyone's mate*

As of January developers of web based proofing tools RTI is part of KPG, Kodak Polychrome Graphics. RealTimeProof 5.0 will include support for Safari, secure approval authentication and lockout features and multiple view and compare tools. These tools show up to four versions of the same file simultaneously, highlighting changed areas, showing only the edits. There will also be news regarding the next step of KPG and RTI's commercial relationship with Heidelberg announced at Drupa, especially with regards to Heidelberg's JDF workflow technology PrintReady.

KPG/RTI is also working on a JDF application server with Esko-Graphics and details of this will also be announced at Drupa. This server will provide JDF workflow support, using Esko-Graphics' Backstage.

### *Agfa's Processless Process*

Agfa's thermally imaged chemistry free plate is due for imminent commercial release. Azura is a wash off plate suitable for 100,000 impressions. Based on Thermalite, Azura has an aluminium base coated with small thermoplastic particles that melt together and stick to the base. A gumming process cleans out the non-image areas. Azura is apparently tough, consistent and has a wide latitude on press. The plate can't be baked but it is Agfa's growth path to a truly processless future technology. It is positioned for 2-up and 4-up and lower volume 8-up CTP producing up to 8000 m<sup>2</sup> annually. ▶

### ▼ **Agfa Marching on with CTP**

Both the Galileo and Palladio platesetters will be available with 30mW violet diodes at Drupa. Both devices will image the N91 plate, which is now available for both commercial and newspaper applications. The 5mW violet diode Palladio is also to be available as a manual device, imaging seventeen plates per hour.

XCalibur VLF XXT and XCalibur 45 XXT are new versions of Agfa's large format platesetters. Both are based on Agfa's GLV technology and support Sublima, Agfa's hybrid screening technology. Both will be available at the end of the year.

Agfa is showing newspaper technologies at Drupa this year and have announced that they will not be exhibiting at Ifra. A new violet platesetter for newspapers, the Advantage CL and CLS, image 160 and 220 pph respectively and incorporate the Afirma closed loop quality control system and support Sublima screens.

#### **... & a New(-ish) Engine**

Agfa's Acento is an OEM'd device (Screen's) for the 4-up sector. It images the new Azura plate and is a fully automated thermal engine available in several configurations of varying productivity from 10 to 20 pph with different plate loading.

Upgrades to both Delano and Apogee will be shown at Drupa alongside a new PDF based colour conversion technology. Alterno is a multiple colour printing tool for reducing or even completely avoiding the need for spot colours. Alterno also lets the user define their own colour standard working with ICC profiles and PDF based workflows. Alterno includes a colour conversion engine to convert spot colours to the user's defined colour standard. This will allow the user to combine multiple spot colours on a single plate to avoid the need for multiple press runs, saving press time and reducing ink costs. Agfa's objective with Alterno is to expand the colour gamut on press, to improve press efficiency and to significantly reduce printing costs. Although it is positioned initially for packaging, it is likely that Agfa will make this technology available for other applications as well.

Agfa is furthering its digital printing efforts through a relationship with Thieme, developers of screen printing technology. According to Agfa, the cooperation is expected to yield a "classical screen press with inkjet heads" and the first results will be shown next year.

### **MY PrinTech's FM6**

Brand new company MY PrinTech has its origins in MY Cartons Printing. At Drupa the company is introducing FM6, a colour conversion software for improving press efficiency and extending colour gamut. This technology

makes it possible to define a single colour curve for the press, however the press has to be completely stable, since essentially its behaviour is controlled in prepress. FM6 has four components: an FM screen, standard CMYK colours and three possible specials (you can use two at any time), and a colour conversion engine. MY PrinTech is cooperating with Creo to market this technology.

### **Punching their Weight**

Punch, owner of Xeikon and Strobbe, is about to gain a lot more attention. The company employs some 300 people and had a turnover in 2003 of €180 million of which 53% comes from own branded technologies. Besides its graphic systems divisions Punch also develops technologies for wireless applications. Strobbe, acquired in 1999, has announced a number of new engines for Drupa.

Strobbe (turnover €27 million with 95 people) has manufactured CTP engines since 1990 and in 1995 developed a device for newspaper production. Agfa sells this as the Polaris and has had 600 of these engines from Strobbe. In 2002 Strobbe started a new CTP development and will present two new CTP engines at Drupa.

The new 8-up PS36 is a larger version of the manual flatbed PS24 4-up device for 650 x 914 mm plates, and images up to 850 x 1050 mm and anything in between. Also new is the PSA 33MV (A for automatic, MV for Multiple Variable) for 2 to 8-up plates. It can have one to ten plate cassettes for up to twenty plate sizes online and is available with either 530 nm FD YAG or 405 nm violet optics. It images photopolymer or silver halide plates at 800 to 2540 dpi, outputting 25 plates per hour (pph) at 2540 dpi. Installed at two customer sites the PSA 33MV is already in production and although no formal pricing is available, it will cost less than €200,000.

Strobbe is launching the Optibend line at Drupa. These register, punching and bending tools use optical registration instead of a conventional three point system. The plate bender holds 42 plate configurations in memory, punching and bending up to 240 pph in optical register with closed loop image quality control for plates up to 1000 x 700. Optibend is available offline or as part of a CTP system.

### **Xeikon Resurrected**

Punch can also take credit for Xeikon's resurrection. The company's installed base may have fallen since 2000 but its 1200 active machines are generating rising toner revenues, so much so that research and development costs for the new Xeikon press are already covered. The new press development was done in close cooperation with customers to build a machine with consistently high quality, integrated workflow and automation, a high duty cycle, ease of use and low Total Cost of Printing. ▶

▼ The Xeikon 5000 is a ground up redesign from engine to consumables and front end. This web press prints on heavier substrates, supports an extra colour, and has better VIP support for high run lengths i.e. over 200,000. It can print on substrates from 40 to 350 gsm and consequently has a very broad application range. Xeikon has stuck to the duplex concept adding an extra colour station for spots or special toners and an online densitometer after the fusing module. This is redesigned as are the development process and the substrate conditioning. The online densitometer closes the loop for automatic quality control and adjustment of densities, dot gain and highlight and shadow rendering. An eight fold more accurate encoder reduces machine sensitivity to banding for improved image quality. The fusing and gloss units are under tighter control and can be controlled independently for each side of the substrate. Overall make-ready is faster and waste reduced. The press runs at 7800 full colour pages per hour, with page costs estimated at €0.02 per page.



The absolutely gorgeous Xeikon 5000

Reliability improvements have been made with a ruggedised machine and an isolated exterior frame to ensure the print engine is not vulnerable to external impacts. A new waste removal system reduces cleaning frequency, toner can be replenished while the machine is running, splicing is improved and support for a broader substrate range makes the press more suitable for applications such as packaging, security and others.

Maintenance has also been simplified through Xeikon's intelligent system to monitor press and anticipate service requirements. It is based on Device Relationship Management (DRM) and wireless technologies.

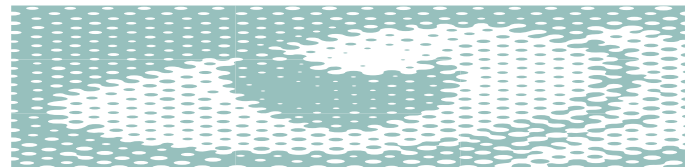
The Xeikon 5000's duty cycle is three million A4 4/0s per month for direct mail (based on 10% CMYK, single paper type, long runs and three shift operation) or 1,500,000 for graphic arts applications (35% CMYK pages with medium run lengths and the press running for two to two and a half shifts per day). Xeikon have not been specific about

what constitutes a long, medium or short digital print run.

The new front end is called Swift and it reflects Xeikon's hefty experience in developing and supporting numerous front ends in the past (Agfa, IBM, Creo etc). Swift has over ten times the power of previous front ends, so it can handle some sophisticated data processing at speed, such as screen selection on a per page element basis. The Swift streamer board can process 800 million pixels per second, enough to power two 5000 engines or three iGen 3s simultaneously. It is designed for high end object based variable data management, providing instantaneous response for raster image processing while printing and adjusting colour on the fly. Swift can process one million variable pages in a single million copy run with very high graphical complexity. The closest competitor to this technology would be Esko-Graphics' PrintStreamer which could do 100,000 and Intellistream which processed around 10,000.

Swift interfaces with workflow modules from third parties to handle stuff like PDF processing, preflighting and ICC profiles. Xeikon may make Swift available as an OEM technology.

Xeikon and Punch are onto a winner!



## Acrobites

*(Something to get your teeth into)*

### CF2 (Common File Format Version 2)

This is the industry standard for exchanging designs of one-ups and complete layouts between CAD and/or prepress systems for packaging and diemaking. If the vendor community's current interest in packaging is for real, it is the standard that we should be hearing rather more about.

CF2 can specify such things as cut, crease, perforation, cut and gap, score and/or half cut, as well as Rillma/Matrix designs (someone probably knows about these), zipper (where there are three parameters: length, gap, and angle). Several other of these specifications have additional parameters to explain how the edges of a package should be created including the depth of a cut, the angle of a crease and so on. It's far from simple stuff and one that few printers will be keen to leap into.

### IGES (Initial Graphics Exchange Specification)

This is another standard that has true meaning in the packaging market, but that may be less than exciting elsewhere. IGES defines a neutral data format to allow the digital exchange of information between Computer-Aided Design (CAD) systems. IGES provides a neutral definition and format for the exchange of specific data, so that using IGES, a user can exchange product data models. These are in the form of wire frame surface or solid representations and applications supported by IGES include traditional engineering drawings and models for analysis and/or various manufacturing functions.

## Spindocs

*(Where the spinner gets spun!)*

*Seybold press release making it sound like "business as usual":*

### "Seybold Publications Relocates to New Quarters"

The editorial operations will move to San Francisco, while BCR will take on circulation.

In mid-March, our editorial operations, which for many years have been based in Media, PA, will be relocating to San Francisco, CA. The move represents a continued commitment on the part of Seybold's parent company, MediaLive International, Inc., to centralize operations in the heart of Silicon Valley in order to increase internal efficiencies and take advantage of proximity to core customers and the Silicon Valley talent pool.

A new editor is now being recruited in San Francisco to oversee the continued production of the weekly Bulletin and bimonthly Seybold Report. The new editor will be charged with maintaining the integrity of information and the quality of the writing that readers have come to expect from Seybold.

Meanwhile, Seybold's circulation and fulfillment processes will be assumed by another publishing company within the MediaLive family, Business Communications Review ([www.bcr.com](http://www.bcr.com)), located in the Chicago suburb of Westmont, IL. Although BCR's content is different from Seybold's, its business model is rather similar: subscriber-based newsletters, strategic conferences and associated trade shows.

Over the next few weeks, we will be working hard to ensure a seamless transition for both the business and editorial sides of our newsletters. In particular, we know that you will have many questions about the change. To answer them fully, we have set up a Frequently Asked Questions area on the Seybold Reports' home page, [www.seyboldreports.com](http://www.seyboldreports.com), and we will be updating it as new questions come up—and as more details of the transition are resolved. As you might expect, right now there are plenty of unknowns to be investigated, challenges to be encountered and solutions to be invented.

As always, we continue to welcome your phone calls and e-mails, especially if you don't see the answer to your question in the FAQ. For more information on the relocation, please contact me, James Smith, at [james.smith@mlii.com](mailto:james.smith@mlii.com). And, as we so often say in our articles, stay tuned."

*What this really means is that MediaLive is making redundant one of the industry's most powerful editorial teams. As if the destruction of the brand*

## Letter From...Streatham

Awroight??

'Allo Spindrifters, 'ow are yah?

Oi'm wri'in from sunny sarf London, in Strea'am an it's fark\*\*\* rainin' agen. We've 'ad so much bleedin' rain, it's really makin' moi paper curl, know wot I mean?

Anyways I'm wri'in 'cos I'm fark\*\*\* naffed off wiv the poxy print buyers arahn 'ere. We've a digi'al press wot ain't wot you'd call slow, an we 'ad a load of 'appy customers. But the customers are all worked up 'cos they fink we're chargin' 'em

▼  
too much, an' we ain't. There's a load a wideboys wot's getting in between us, an' messing abaht wiv our customers, tellin' 'em all sawtsa b\*\*\*cks abaht cheap deals what mean bleedin' nuffin'. It gets righ' up my nose an' it's causin' us loadsa grief wiv everyone. These plonkers call 'emselves "Print Procurement Specialists". Print Pimps more like.

Aas abaht you lot gettin's off your arses and pullin' yer fingers aht 'n' tellin' customers they don' need no poxy print buyers. Digi'al prin'in' is lubbly-jubbly stuff, it's all abaht makin' life easy, innit 'specially for customers, like what we got? Digi'al prin'in' s all abaht keepin' it simple for customers innit? Wotzza poin' a makin' print fark\*\*\* 'ard for customers, when we all knows wots wot for yer atchal stunnin' lookin' print and 'ow to press the bleeding switch?

Me an me mates luv readin' Spindrift, mindyou, ya wanna giv up on these reader's le'ers doncha?

La'er.

Mark M. Dotson

## Driftwood

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

### Green ink

Environmental issues are not new to the graphic arts industry. Whether we should use silver based plates or not in CTP is just one of many examples. A rather more universal and less easily resolved concern is how to best recycle paper, and which printing methods make the recycling easy or otherwise.

At a recent press event at Xeikon's headquarters a toner chemist pointed out that many inkjet papers were more or less impossible to recycle. Even worse – a tiny amount of the wrong sort of inkjet paper in material due for recycling, could apparently spoil the whole batch of paper pulp! This conclusion wasn't only made by Xeikon's chemists, but also by the German based research institute Ingele ([www.ingele.de](http://www.ingele.de)). Although conventional print and toner based print, including much xerographic print, is fairly easy to recycle through de-inking, it's apparently another story with liquid toners and with some inkjet inks.

According to the Xeikon chemist, almost equally as problematic as the inkjet papers are other papers printed with liquid toner, such as the Electro Ink in the HP Indigo machines. Another apparent problem with liquid toner is that some of the components can be known carcinogens. And many digital printing inks use solvents that can take up to two weeks to completely evaporate. Great.

Of course Xeikon's environmental concerns show the company in a favourable light, since the Xeikon toner is fully recyclable. The company wants to present its green credentials confidently relative to its competitors such as HP Indigo with its liquid toner. But there is more to this than melodramatic marketing. It is a mistake to dismiss environmental concerns as a passing fancy.

If print is to remain competitive, it has to lead, not follow, its markets. And that means taking some sort of initiative regarding recycling problems. Print has often been mockingly described as a process of killing trees and smearing them with grease. The industry should distance itself from such a crass image and instead position print as the ultimate communications medium. Books and newspapers are portable, user friendly and don't depend on electricity. And their producers are guardians of the world's woodlands and forests. What more could the greens ask for?

## Say What?

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

*This is an absolute gem of a piece, by Terry Owen of South Africa's Graphix magazine, writing about Gavin van Rensburg of Kemtek (South African distributor for Screen)*

"Gavin has been associated with Screen for some 20 years and if you think that any of his passion and dedication for the products has dissipated over the years, you'd be very wrong. El contraire, if anything, it appears to have grown in leaps and bounds, almost like the market share of the products he represents. There is a determination of steel that flashes from his eyes and sparks up the room and a feeling of boundless and bountiful territory and a tenacity that will rise to any occasion when he enthuses about his work. It's quite remarkable watching Gavin in action because all this belies his quiet and affable persona. These qualities are, indeed, there, but his ambition for Screen will override anything that will hinder the spectacular features of these products reaching their ultimate potential.

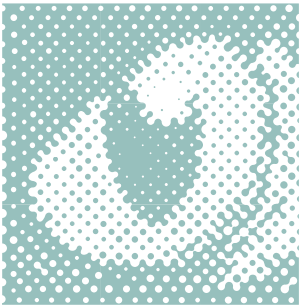
That's why I say, if you want to know anything, and I mean anything at all about Screen, computer-to-plate, JDF, or



▼  
whatever, an hour spent talking to this man could be worth its weight in gold.

As a kicker, he fills me in with a bit of background detail to Screen. It's almost as if he is showing me a photo album marking the growth of his baby boy into a sterling and a strapping man and his voice resonates with all the pride of a loving father. He encompasses that which nurtures and develops, and this again is almost at odds with those flashes of voltage-charged determination – but as he speaks, it actually fits neatly together and you realise that his multi-layered approach is exactly what has been needed to drive Screen to where it is today.”

*Lucky Screen. Lucky South Africa, for that matter. Every company needs someone who flashes voltage-charged determination.*



## Boomerangs

*(Your feedback fed back)*

**From:** “David Howes”

**Date:** Tue, 17 Feb 2004 12:50:37 -0000

**To:** “Laurel Brunner”

**Subject:** Emailing: buyers-top

Please put an apostrophe in this heading or we burn a copy of Spindrift on the lawn.

### Buyers Guide

Dave

#### Todd Brunner replies:

Dave,

Whoa! Put those matches away, big guy!

### Buyer's Guide

I've been assured by our massive teenage web staff that in future they will concentrate on proper grammar and typography at least as much as they do on sex, complexions and their iPod playlists.

Cheers,

Todd

## Managing Colour in the Workflow

It's tempting to think digital colour workflow management is a new thing, but it's existed since the early days of digital prepress. The difference now is that colour management is out in the open. Instead of existing within a tightly controlled, closed system, everyone can get involved in colour production using off-the-shelf technologies. Some tools such as Photoshop create excellent colour files and some of them, like PowerPoint, do not. Graphics professionals still have to cope with the results which may be why colour management is gaining attention, albeit for the wrong reasons! Despite the horror stories, working with colour data doesn't need to hurt (much) and managing colour efficiently can seriously reduce production costs and improve throughput.

Take colour proofing. Approving proofs with only a couple of correction cycles and output and courier charges, saves money and time. Remote softproofing extracts even more cost so this scenario is getting increasingly popular. A colour managed workflow can also save time and money on press, which is probably the best reason of all to implement it.

Of course coming up with a cunning colour management plan isn't easy, but part of the problem has been a sort of cultural confusion. Somewhere between the mysterious world of colour management and traditional print, and the zingy new world of digital production hovers an identity crisis. The RGB versus CMYK debate is as much about this cultural ambivalence as it is about anything else. Fortunately the benefits of working with RGB are increasingly recognised.

### What's the Point?

The best place to start when building a colour managed workflow is to work out how colour management might enhance a business's creative and production performance. Prepress production ideally supports anything a designer wants to do, but this isn't the best place to start. Colour management is all about accurate output, so the workflow should encompass all tasks associated with output requirements, with options to support new tasks and functions when required. And it should use proven technologies working with standard targets such as the IT8 or Ksmart colour targets.

Virtually all image creation is RGB based, so this should be the colour space of choice for digital image editing and processing. Device independent RGB workflows with raw RGB data ensure file independence, and freedom from specific output constraints. Deciding to work with RGB is only the first teensy step along the way however. The next step is rather more tricky. It requires a long, hard look at the entire production chain including every possible source of colour data and every possible kind of output required, from digital cameras and scanners through to proofers and presses.

Audit all of the prepress equipment; computers, software and measuring tools, quantify throughput and work out where the costliest production errors occur. If any of these are to do with colour, you have a good starting point for workflow revision. Talk to suppliers about colour management, but make sure you understand thoroughly what you are asking for, and what they are offering. Talk to customers and pressroom staff too and involve them in any workflow changes. ▶

### About the Buyer's Guide Series

This article is 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, African Printer, Print & Publish, Printing World, Seybold Publications and Spindrift.

**The Buyer's Guide to Colour Management Sponsors:** Agfa, Creo, Esko-Graphics and KPG.



## ICC Compatibility

Any colour management tools installed should be ICC compatible. This international standards body has developed a series of specifications for managing colour in an open digital workflow based on a common processing model for colour data.

The ICC's profile specification defines the spectral and behavioural characteristics of each device used in a workflow and is relevant for everything from a digital camera to the cardboard used in packaging printing. Together with the ICC's Profile Connection Space, which is based on CIElab, device profiles can be used to calculate the right colour values for a colour file, taking into account those factors influencing its appearance.

## Harnessing the Components

One of the biggest difficulties with a complex data environment is that there can be many variables to control. Colour is horribly subjective so it is even more vital to identify and manage variables. Even the origination software used can introduce anonymous factors into the workflow, and so standard defaults should be set up for all operators. Even Word, if it is to be used in a colour managed workflow, needs to be kept under tight control. Use the same versions of Photoshop, Illustrator, Xpress and InDesign and use the same defaults on all workstations. Equally important is that everyone involved in a colour managed workflow understands what happens to files moving through production. This may seem basic, but it makes a serious difference to file processing.

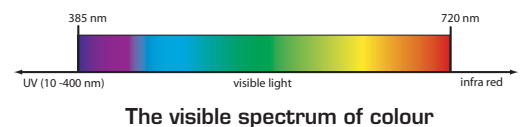
Yet more important is regular hardware calibration, particularly monitors. Manufacturers of high end monitors for colour critical work such as La Cie and Barco generally recommend specific calibration tools and provide appropriate software. There are however many other tools on the market such as Colour Blind's Prove It, a simple but effective method for calibrating monitors and building ICC profiles. GretagMacbeth's Eye-One is a similar tool for profiling monitors and printers and further up the scale is Pantone's ColorVision Suite which includes all tools necessary for precision monitor and printer profiling. Relatively new is the Monaco Optix XR from X-Rite with a built-in function for evaluating the status of the monitor.

## Colour Management Developments

The development community has been pretty quiet of late, but in the run up to Drupa a number of companies have declared future strategies for colour management. Fortunately everyone is sticking with ICC standards. Many of the new developments echo proven ideas, originating with Barco Graphics (now Esko-Graphics) such as InkSwitch for ink specification and BlackSmith for black channel control. These are primarily implemented in packaging applications.

Agfa will introduce a new technology for managing colour in packaging applications. Alterno is a multiple colour printing tool for reducing or even completely avoiding the need for spot colours. Alterno also lets the user define their own colour standard working with ICC profiles and PDF based workflows. Alterno includes a colour conversion engine to convert spot colours to the user's defined colour standard. This will allow the user to combine multiple spot colours on a single plate to avoid the need for multiple press runs, saving press time and reducing ink costs. Agfa's objective with Alterno is to expand the colour gamut ▶

**Virtually all image creation is RGB based, so this should be the colour space of choice for digital image editing and processing. Device independent RGB workflows with raw RGB data ensure file independence, and freedom from specific output constraints.**



on press, to improve press efficiency and to significantly reduce printing costs. Although it is positioned initially for packaging, it is likely that Agfa will make this technology available for other applications as well.

Creo is also working on improving colour production. At Drupa Creo will present Staccato Extended Colour Screens. This product brings the total screens available in a single job to ten, helping printers avoid problems with trapping and overprint artifacts. Bundled with this product is Staccato 18 a new Staccato size that is slightly finer than Staccato 20. It presents a higher resolution image and a closer representation of a continuous-tone image.

Creo's Spotless uses the process control of Squarespot imaging with the smoothness and color stability of Staccato to create spot colours without special inks. Spotless 4 is used for CMYK work, and Spotless X allows printers to work with extended colours, for printing colours far beyond the conventional gamut.

Spotless is based on the characterisation of everything in the print process including the paper, ink, fountain solution and so on, in order to accurately predict results on press. The technology integrates with ICC proofers and works with any inkset. It sounds jolly impressive and Creo claims that Spotless can convert most of the Pantone library to suit a printer's conditions.

Fujifilm has also been busy and will introduce Fujifilm Image Intelligence for managing colour across every device in the workflow. At Drupa the company will demonstrate a Fujifilm colour network based on RGB and managing colour files from origination with a digital camera, through to output on a high quality printing engine.

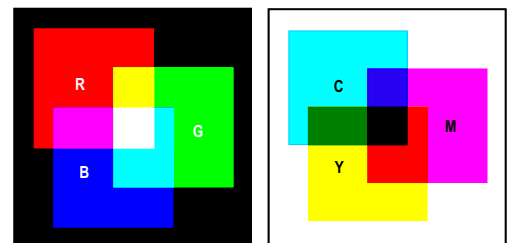
KPG is the industry's leading developer of proofing technologies, with devices ranging from screen based softproofing with MatchPrint Virtual and the recently acquired RealTimeProof, to extremely sophisticated output devices such as the Approval XP. It isn't surprising then that the company has developed the Colour Fidelity System.

The Colour Fidelity System is an ICC compliant colour production environment for colour critical data management. It functions throughout the workflow from capture to output and can be implemented in three modular stages, all of which can be combined into a single system. Module 1 configures RGB images for specific output, module 2 matches onscreen colour for multiple outputs and module 3 manages profiles and rasterises the data files ready for imaging.

Screen is also expanding its colour management reach and is one of the few companies to have declared colour management support within a JDF compliant production environment. The new image quality management module incorporates artificial intelligence and colour management tools used in Screen's core digital image capture technology. RGB images coming into the Trueflownet workflow are managed with all colour repro information held in an associated JDF compliant procedures file.

Colour managed workflows are even getting some attention in the corporate environment, where HP is claiming to have made a new colour management breakthrough. CMYK Plus is intended to preserve SWOP hues while expanding the destination CMYK output space ▶

**One of the biggest difficulties with a complex data environment is that there can be many variables to control. Colour is horribly subjective so it is even more vital to identify and manage variables.**



Additive and Subtractive Colour Mixing.

and preserving the black channel. The idea is to ensure a coherent appearance across all HP devices.

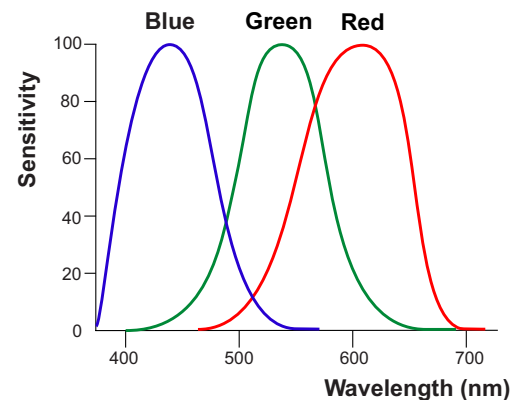
### Small is Beautiful

Besides these large companies there has been considerable activity elsewhere in the market. Alwan is a small developer working on colour management tools for ICC workflows. Alwan CMYK Optimiser automatically and dynamically corrects colours and ink weights of incoming files prior to sending them for output. CMYK Optimizer is essentially a preflight checking tool for colour that checks incoming files to help reduce the amount of ink used without compromising print quality. CMYK Optimizer analyses the CMYK values of incoming images, correcting them for optimum output according to the demands of the destination output process. The software sorts out ICC Profile mismatches and also dynamically corrects image dependent Total Area Coverage mismatches. This avoids excess ink on the paper which can create ink set-off and overprinting problems. Dot gain mismatch between that of the incoming separations and the actual substrate is also corrected and black generation is optimised for ink savings and higher print quality.

MY PrinTech has its origins in MY Cartons Printing and has developed a colour tool called FM6. This is essentially a colour converter but although FM6 extends colour gamut, this was not the original goal. FM6 is about getting more print jobs on press in less time and it has four key components: an FM screen, standard CMYK colours and three possible specials (you can use two at any time), and a colour conversion engine. The technology only works on linework leaving alone image areas and converting data into the special FM6 colours. FM6 uses seven inks to print any spot colour to within a Delta E of less than two (most printers print to within five Delta E). There are two fixed combinations, CMYK plus FM6 orange, blue or green. This technology will be on show at Drupa and MY PrinTech is cooperating with Creo to market it.

Clearly there is a lot to choose from, and there are lots of reasons why colour managed workflows are necessary in order for the printing industry to stay ahead. Developers are increasing the output gamut on inkjet printers and conventional presses, through clever colour conversion technologies and screening. New dye based and long lasting inks with wide colour gamuts are coming onto the market and we are seeing an increase in the number of colour stations on digital engines such as the new Xeikon 5000 and Indigo 5000 presses. This all gives customers more choice, but it also makes the need for colour consistency across devices and applications even more important. In for example transaction printing where colour use is rising, colour will need to be matched across a wide range of engines used in diverse environments. Developments in spot colour simulation will help here as will the increase in soft proofing, however there will be no way of avoiding the need for a colour managed workflow. Already many printers have seen substantial financial and competitive returns through managing colour efficiently, but success isn't an immediate result. Colour management needs careful planning, testing and re-testing. Like the Japanese Kaizan concept, colour managed workflows are about constant, reiterative, never ending production improvement.

– Laurel Brunner



Responses to different wavelengths of light.

## Streamlining the Machine

Wyndeham Heron is one of the UK's largest magazine printers, receiving between fortyfive and fifty thousand PDFs and producing ten thousand digital printing plates per month. Unsurprisingly the company's manufacturing process is fully digital and highly automated but for Wyndeham Heron there is only one way to take its production model even futher: JDF, the Job Definition Format.

JDF takes the traditional concept of digital workflow automation, extending it to reach all aspects of the business. For print manufacturers like Wyndeham Heron this technology is designed not only to increase efficiency, but also enhance profitability and customer services. Wyndeham Heron is no stranger to digital production having first invested into digital workflows in 1998. In September of that year the company became one of Agfa's first users for the Apogee prepress workflow management system, producing imposed 8-up films on Avantra filmsetters. Wyndeham Heron has beta tested Apogee technologies since 1999 and in 2001 moved to computer to plate output with the installation of a Galileo VXT. The company subsequently added RTI softproofing technology, two Lüscher platesetters producing plates for a 64-up Man Roland Lithoman press, with M+A's registrator and punching system for trimming and punching these enormous plates. In 2002 a second Galileo VXT increased capacity yet further.

### An Investment for Profits

There was also a miscellany of information technologies and peripheral equipment. Wyndeham Heron's overall production spend between 1998 and 2002 was around £3 million. During that time turnover rose from £22 million to over £47 million. Staffing has fallen from 70 people in the film planning and platemaking departments in 1998, to 22 people producing plates today. The volume of work today is more than double the 1998 throughput and profitability has risen. According to technical director David Brown "it's very difficult to quantify it, but without the investment in a digital workflow we wouldn't be anywhere near as successful as we are today. Prior to 1998 we had a prepress department that was constantly running around in circles trying to keep presses busy. Now we have a digital workflow, everything is happening in the background and we use the systems to check files coming in from customers. The digital workflow makes the business profitable because it's keeping the presses busy."

### Productive & Profitable?

CTP has yielded vast productivity improvements for Wyndeham Heron: approximately ten out of five thousand plates per week are remade, 32 page sections that used to take ten to twelve man hours to produce, today average 45 minutes. Investment into the workflow has been as David puts it "absolutely crucial to profitability". However he adds that "it's difficult to quantify. We handle five or six weekly magazines, six days per week and it is the prepress investment that has improved output and productivity making this achievable." This urgent need for further accountability is why the next stage for Wyndeham Heron has to be integration of production and MIS using JDF. MIS will build the job tickets with all relevant user details, production criteria, rights information, and naming conventions for all associated files. MIS will pass a JDF job ticket to the Delano project management system, ▶

**Company:**  
Wyndeham Heron, Essex

**Type of work:**  
Magazine production and printing.

**Equipment:**  
Platesetters from Agfa and Lüscher, Apogee workflow and Delano project management technologies.

**Time of installation:**  
1998 to 2004

**Top advice:**  
Use technology investment to take costs out of the workflow, improve services and enhance profitability.

**“JDF will enable the customer to take responsibility for the faults in their files and fix them. Through Delano our customers can manage their own approvals and corrections without having to involve us, knowing that nothing will happen to that section once the customer has approved it.”**

**– David Brown, technical director, Wyndeham Heron**

using this file to set Delano's parameters with JDF bridging the two environments.

JDF will help quantify Wyndeham Heron's profitability but the company also hopes it will help with customer services. Even though around 75% of customers supply PDFs across the web working with RTI technology for soft proofing, customers need more support and JDF is a means of doing this. As David sees it "JDF will enable the customer to take responsibility for the faults in their files and fix them. Through Delano our customers can manage their own approvals and corrections without having to involve us, knowing that nothing will happen to that section once the customer has approved it."

But David wants to take it further: "The next link we are looking for is JDF coming from the publishers, so that commitment starts prior to our MIS generating the job ticket ... JDF starts with the job and that starts with the publishers." He adds that "many customers want to get involved with JDF but publishers need to invest in MIS".

JDF is clearly a journey that starts with a single step, and some publishers have still to take that step. In the interim Wyndeham Heron is building web interfaces for customers who want to feed information into the printer's production system via the web. For David the journey is about constant improvements even though "improvements in the workflow are the intangibles. If you look at some of the problems CTP has given us, it's predominantly about communication because things happen so quickly with digital workflows it can be difficult to communicate around the business. One of the things we want to get with JDF and Delano is real time communications within and without the business."

Over time JDF will bring together Wyndeham Heron's many islands of automation into a single cohesive business system for print manufacture. "We want to be able to look at our jobs and have all of the information about that job available. We want to get reporting information back and start to target people who need support and help to ease their problems." Clearly for Wyndeham Heron there is no turning back "we've got to be there, we've got to push on and persevere. For us JDF is the only way forward".

– Laurel Brunner



## About the Buyer's Guide Series

This article is part of the Buyer's Guide series due for publication in May.

The Buyer's Guide to JDF Sponsors: Agfa, Creo, Enfocus, Esko-Graphics and Screen.

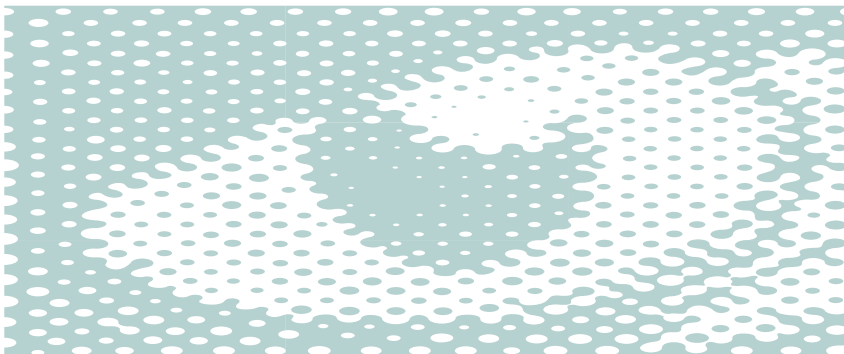


## A Special Message

Spindrift is a labour of love for a fantastic industry. We are sure you appreciate that. We are very grateful to our subscribers for your support. However, too often we get comments about Spindrift content from people who are not on our subscriber list. If you are reading a copy of Spindrift but have not taken out a subscription yourself, please do not assume you are a group subscriber. If there is any doubt contact us and we will help you get your own subscription. Our web site now also has support to handle multiple subscription orders.

We charge a measly €50 for an annual subscription. This is less than it costs you to fill up the car with fuel. It is less than you spend going to the movies with your family, and less than you spend on duty free stuff when you're bored at the airport. And you probably claim that back as an expense anyway. This much we know.

So given these basic truths and the fact that Spindrift relies on subscriptions income for its very existence, please subscribe. If you choose not to, please understand that we will find you. The next time you spill paint on the carpet, burn your toast, lose the car keys, have to go to the dentist, or generally have to suffer some annoyance or inconvenience, it will be Spindrift's digital pixies getting in your way. Thank you for your support.



### Copyright ©

All rights, including copyright, belong to the originating author. In accessing the Spindrift newsletter, you agree that you are only using the content for your own personal edification and non-commercial use. You may not copy, broadcast, share, store (in any medium), send, adapt or in any way modify the content of any Spindrift article or element without the prior written permission of either Digital Dots or the originating author.

If you do believe that you are in some way exempt from the rules of copyright, please remember that karma catches up. The pixies will find you.