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Spindrift

...Savouring The Graphic Arts Industry Since April 2003

News Focus • Opinion
Reviews • Techno-Babble
Attitude

Volume 3, Number 6
10th October, 2005

Forum • *n.* (pl **forums**) **1** a meeting or medium for an exchange of views. **2** chiefly N. Amer. a court or tribunal. **3** (pl. **fora**) (in an ancient Roman city) a public square or marketplace used for judicial and other business.

– From the Concise Oxford English Dictionary

Dear Reader,

We apologise for the lateness of the arrival of this issue of our journal. Well, you were most probably too busy to notice anyway. Is it us, or does it seem that the multitude and speed of events in our industry are just ever-increasing? The pile of press releases we go through for our news focus seems to get higher with each month. Anyway, this time we feel we do have a legitimate excuse for our tardiness, as we have been unusually busy ourselves. Within the past couple of weeks our new and improved website went live at www.digitaldots.org. Well, we say website, but it is a lot more. While a lot of companies' websites still work sort of like shopping windows, where the visitor can view, passively, what is on offer, our site is a portal – which of course means a door of sorts – through which our visitors are invited to enter a wonderful community of graphic arts interactivity. We have built this community for you, as a place for all of us to meet and air our views and share experiences. We have set up a number of forums, both technical ones and business related ones, and of course one about food – which we love almost as much as we love digital workflows... We urge you to have a look at the site, and to register and take part in our forums. We'll "see" you there!

In the meantime, we are getting ready to go to Leipzig and meet the newspaper industry (yes, there's a special forum for you too at www.digitaldots.org) at the yearly IfraExpo. We will be discussing news and trends from the show both on our website and in next month's Spindrift.

If you see us in Leipzig, say hello.

Cheers from the Spindrift crew,

Laurel, Cecilia, Paul and Todd

In This Issue

A closer look at newcomers

In this issue's Expandocs (where we expand on recent or semi-recent news), Laurel Brunner looks under the hood of the Xerox Docucolor 250, and scratches more than the surface of Fujifilm's two new processless plates, the Brillia Pro-T and Pro-V.

see pages 8 & 10

Spanish plates

We begin a series of profiles of the plate manufacturers of this world with the smallest international plate manufacturer, Spanish outfit Ipagsa. Writes Laurel Brunner, who went to visit the company in the summer: "Although there are many companies supplying digital plates around the world, there are really only a few dedicated digital plate manufacturers. By far the smallest and youngest of these is a Spanish company founded in 1985 and still based at its present location near Barcelona. Compared to the booming voices of its competitors, Ipagsa is a mere whisper. And yet somehow this tiny player successfully competes in a world of mass production and commodity supply." Read the full story...

see page 13

ΔE deviation dip

Paul Lindström has tested another batch of hardcopy proofers and shares the results. This time he puts Efi Colorproof, Oris Color Tuner and Perfectproof's Proofmaster through their paces.

see page 17

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News Focus

Since we have revamped our website, we are encouraging subscribers to let us put links to news about their activities rather than running lengthy news pieces in Spindrift. There is so much going on in this industry and we now have such a diverse readership, that it is virtually impossible to provide news analysis relevant for all of our readers. On the website (www.digitaldots.org) we offer a service to subscribers who would like to share what they are doing. You just click on the subscriber links to find out in more detail what people are up to.

Of course we aren't abandoning news altogether, heaven forfend. Instead we have put together a list of items we have found interesting over the last few weeks. Particularly clever stuff will be given more attention in our Expandocs section. This month's Expandocs is on Fuji's new processless plate technology and Xerox Docucolor 250.

Hopefully this way of organising news will be of more use to you than a super long news section.

Of particular interest in the past month, in no particular order:

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 €80 and can be obtained by going to 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.

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Word from Print '05 was generally positive with several companies exceeding expectations. Agfa sold more than 100 new digital systems on site, including platesetters, software, large-format digital inkjet printers, a digital inkjet press and consumables. Artwork Systems took record orders valued at \$2.6 million during the show and so did Presstek with over \$5 million in sales commitments received, representing approximately 100 units of equipment.

Dalim Systems, developers extraordinaire of workflow management and production technologies, won a "Must See" prize during the show. Kodak received seven of these prizes, which in relative terms isn't very many really.

Presstek and **EFI** announced an alliance to develop products for small commercial printers, such as an extended version of Presstek's new Facet RIP.

Enfocus introduced Pitstop Automate which further automates PDF preflight, PDF editing, Action Lists, and Certified PDF to make advanced automation viable even for small companies.

Xerox said that its customers are producing 8 billion pages annually on Xerox digital production colour systems worldwide. Customers running iGen3s are about to break the three billion page mark. More than 70 iGen3 presses are printing 1 million pages or more in a single month, and more than 60 customers have multiple iGen3 presses.

Heidelberg and **Xerox** demonstrated how digital printing can work within offset environments, using Heidelberg's Prinect Workflow Management System and the Xerox Freeflow Digital Workflow Collection.

Global Graphics showed a new web based system to simplify job control and monitoring work heading for the Harlequin RIP.

For packaging printers, **ORIS** demonstrated how its Color Tuner technology can directly handle N-colour ICC profiles containing up to ten channels and generated by Gretag Macbeth's Profilemaker 5 Packaging software.

Kirkbi has mostly pulled out of **Esko-Graphics**, transferring its ownership to a Danish private equity group.

▼ Kirkbi will hang on to the ownership of Esko-Graphics' small format offset business and is looking for someone to partner with to develop this business further, while Esko-Graphics will focus exclusively on packaging and display markets. Axcel, an industrial investment company, and Esko-Graphics are not discussing terms, but Axcel has funds of over €800 million to invest. Esko-Graphics expects net revenues for 2005 of over €110 million, an increase of 12% over 2004. The company's CEO, Kim Graven Nielsen is leaving and Esko-Graphics board member and current COO Carsten N. Knudsen will become Esko-Graphics' CEO.

The **Moroccan DGSN** (Direction Générale de la Sûreté Nationale) has awarded a contract to the French company Thales Security Systems (TSS) for a complete card production and personalisation system. TSS will produce for the Moroccan security department a highly secure national e-ID card containing an integrated RFID module (Radio Frequency Identification). As part of this project, Agfa's Specialty Products business unit is to provide TSS with a sub-system consisting of production/personalisation equipment, consumables and materials for the production of about 20 million e-ID cards.

HP and **Agfa** have announced a cooperation to integrate the HP Indigo digital press with Agfa's ApogeeX Workflow.

Markzware has upgraded Flightcheck Professional to version 5.7, to include tools that take full advantage of OSX Tiger and improvements in Xpress 6.5. It also has full preflight support for Creative Suite 2.0 and is free.

Zinio Systems has launched the first global distribution channel for published digital media. The Zinio Global network is an online newsstand that delivers some 400 titles to readers' screens around the world, on demand. The company creates "exact replicas of the print versions" on screen, but does not provide any printed output.

In the US, **Canon** and **Adobe** are working together on a digitising technology for security and print solutions based on PDF. It combines Adobe Livecycle and PDF with Canon's Imagerunner MFP (Multi Function Printer) and associated scanning software.

Kodak is installing its first Versamark VT3000 at Dde-dse (is this a tune??), a German IT group which will use it to sent personalised direct mail to its clients.

Sharp Corporation has developed a "Mega-Contrast" LCD screen with an unprecedented contrast ratio of 1,000,000:1, which is way beyond displays such as CRTs, plasma and organic EL displays, and is apparently the highest level in the industry. The new 37", 1920 x 1080 mm screens deliver a wide dynamic range and have a luminance of 500 Candelas per square metre.

The **International Digital Enterprise Alliance** (IDE-Alliance) has joined the ADSML Consortium to assist in developing the ADSML Framework. This is supposed to be the global suite of standards for advertising to beat all standards for advertising. We've heard some ugly rumours about the ADSML efforts, and our views on ADSML are polite, of course. Sensible progress will doubtless be at the top of the IDEAlliance peoples' list.

A printer in **Wales** has become Agfa's first company in the country to go with its Azura chemistry-free plate. According to one Welsh digital prepress house we spoke to recently, Welsh printers are not a terribly progressive bunch, so this is a serious indicator for the attractions of chemistry-free and processless platesetting.

Presstek has installed a Dimension425 Excel CTP system at Vision Print in Co. Dublin; yet another vote for processless. Presstek has also announced controlled availability of Presstek Aurora chemistry-free thermal plates designed to operate with Creo Trendsetter and Screen Platerite thermal CTP systems. Very wise indeed.

Kodak is installing its first Magnus 400 Quantum CTP system in Europe at Kent Art Printers in the UK. The device will image Kodak Thermal Direct processless plates.

Meadows, a developer of publishing technologies, has developed a Windows version of its Autoprice tool for Quark Xpress 6.5. This tool links prices, product numbers, pictures and copy in a database sitting underneath Xpress and Indesign documents.

Screen has introduced a cheaper version of its 16 page Platerite Ultima 16000 thermal CTP engine. The machine's imaging speed has been brought down (!!) from 16 to 14 1148 x 1143 mm plates per hour at 2400 dpi and shipments are expected to start in Europe this month.

Following extensive beta testing at **Wyndeham Heron**, the Wyndeham Press Group's flagship web offset print site, the company is installing the latest version of Agfa's

▼ ApogeeX as its standard workflow system. The Wyndeham Press Group is reorganising and simultaneously standardising production workflow processes across the 15 companies in the group.

Esko-Graphics has introduced a small footprint flexo platesetter for narrow web, tag and label printers. The Cyrel Digital Imager (CDI) Spark 2120 can image photopolymer plates, ablative film, or polyester-base letterpress plates up to 533 x 508 mm. There is also a new Spark 4260, a flexo platesetter for all digital flexo plates up to 1067 x 1524 mm. Esko-Graphics has also introduced The DPX Lite, a polyester CTP system for portrait size presses.

Apple Computer Inc. has apparently sent invitations to reporters for a special event this week, where the company could unveil a long-rumored iPod that can display videos.

RIPit, a workflow and CTP supplier in the US, is offering a new CTP system, the Speedsetter VM4. This violet 4-up metal platesetter will be available early next year. According to the press release we received it will cost "\$59,500K" but that seems a little steep, even though the price includes the RIP, excluding consumables deals. \$59,500 would be a good deal though.

Kodak has announced a new version of its Thermoflex CTP device for narrow flexo offset production. With it, users can image offset plates in addition to flexographic and letterpress plates and film on a single device.

The German slice of ad agency Leo Burnett is installing **Quickcut** technology to manage its advertising creation, validation and delivery. Leo Burnett Deutschland supplies all newspaper ads and over 90% of magazine ads digitally, all of them tailored for flawless output at target publishers' production sites.

Canon has introduced two new large format printers positioned for proofing applications. The 44" Imageprograf W8400 and 24" W6400 have, apart from having nearly unpronounceable names, wide colour gamut and Canon claims that the 4 picolitre droplets result in gorgeous output. Canon also claims it has almost doubled its share in the large format market, with sales growth of 68% over the last half of 2004/2005. Installed base is apparently 5123 in the sector. The W8400 costs £4999 and the W6400 £1999.

Google plans to make San Francisco a wireless hub, and has offered to blanket the city with a wireless network. This digital blanket would allow residents to log on to the Internet free of charge. The shape of things to come.

1,000 print providers worldwide use Agfa's **Sublima** XM Screening.

And this should cheer up all of us. According to a study by researchers at the **University of California, Berkeley**, the short term memory problems that come with age are nothing to do with inability to focus. The researchers apparently think that older people have a problem with filtering out surrounding distractions. So the older we get, the more curious we get, and the more ambitious we are to learn more. That explains it [explains what? Ed.].

A number of large **Danish newspapers** have subcontracted ad production to BL Prepress, Scandinavia's largest prepress company. The group produces some two million millimetres of ads (only the Danes use this measure, but they seem to like it) per week using Webproof, for online proofing and production management.

Enfocus Certified PDF has been integrated into the school programs of the Grafisch Lyceum in Rotterdam. Enfocus' Status Check, Instant PDF, Pitstop Professional and Pitstop Server, are being used in the school programs for design and for media management, as well as in the prepress skills training courses.

Silicon Systems, one of a small but feisty band of IT suppliers specialising in graphic arts applications, has introduced a new server. The Xeus 64 is designed specifically for prepress, printing and publishing, featuring 64 bit technology, 3.2 TB of scaleable storage, 3.4GHz dual Zeon processors and unlimited client access, Mac or PC. It costs less than £2000.

Mr. **George W Bush** responded to a journalist asking why response to hurricane Katrina took so long with this: "Well, there's a lot of food on its way, a lot of water on the way, and there's a lot of boats and choppers headed that way. Boats and choppers headed that way. It takes a while to float them." Poor dears.

What's New(s) At...



This will be the place to look for highlights of the past 30 days in the DD community. As we've just launched the site there's not much to talk about here...yet. But we know that will change when you and all of your co-workers, associates, customers, clients, friends, enemies, family, cronies, Squash partners and drinking buddies clamber onto the site and start contributing.

digitaldots.org is about you. We scrapped our old site and started again from scratch because we got bored of the idea of websites being nothing but sales tools, when they can be so much more. So we've tried to create a place where everyone can contribute. It's early days yet, but we hope it will be a place where we can all learn something and also have a bit of fun.

And that's largely down to you. We need your help to build a community. So please take part when you get the chance. It won't happen without you!

So what can you do at www.digitaldots.org?

- **Forums:** Take part in discussions about hot industry topics like JDF, CTP, Digital Printing, the Newspaper industry, Colour Management and Proofing, Preproduction Management and the industry in general.
- **Forums:** Want to talk about a topic that we don't have a forum for? Just let us know and we'll add it.
- **Site:** Download lots of free stuff, including the complete 2004 Buyer's Guides, volume 1 of Spindrift and exclusive editorial content.
- **Site:** Subscribe to Spindrift and pre order the Buyer's Guides 2006.
- **Forums:** Discuss food and recipes. Dazzle the community with your culinary prowess and contribute your taste sensations. The best recipes will go permanently into the Direct To Plate section of the website.
- **Site:** Salivate over the community's best recipes in Direct To Plate.

- **Forums:** Discuss, debate, rant and rave about the silly things that people say and write. The community's best contributions will be featured in the Say What? section of the site (see Coming Soon below).

- **Site:** Take part in the comprehensive DD industry survey.

Coming Soon:

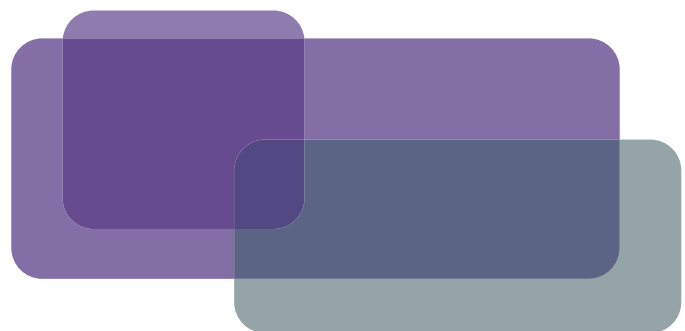
- **Site/Babble-On:** Realtime blogs from trade shows and events by the DD staff and guest bloggers. Get the news as it happens!

- **Site/Say What?:** Read about silly things that people write and say out there. Like an expanded version of Say What? and Spindocs from Spindrift, rolled into one, but dealing with the world at large, not just the Graphic Arts. And guess what? You can contribute too (see above)!

- **Site/News:** RSS feeds of industry (and possibly other) news.

- **Site/Boomerangs:** Your e-mails and our replies as in Spindrift, but expanded. Also the best posts from the forums will be featured, including "Post Of The Week".

But none of it will work without you, so head on over to www.digitaldots.org now!



Letter From... Grenoble

Mes Amis Spindrifteuses,

Il y avait a long time since j'ai have écrivez to vous, mais j'ai un petit problem. Je understand que Microsoft a promis de support pour PDF dans le next version de Office. Steven Sinofsky est un Senior Vice President chez Microsoft et il a dit that "Customers today are asking for a format that represents the "printed page" and can be viewed on multiple platforms, even if a person does not have Microsoft Office."

Correctez-moi if je suis wrong, mais didn't Jean Warnock dit that a longue temps ago? Monsieur Sinofsky a dit also que: "Every month we receive over 120,000 queries worldwide for "PDF" through Microsoft Office Online. And of course, our MVPs [Most Valued Professionals] have expressed strongly their desire to see this functionality integrated with Microsoft Office". Et je believe que Microsoft a beaucoup de problems avec ses customers, parce que les customers want PDF pour sharing ses files.

Comme vous know, je travail avec mop et bouquet chez une maison en Grenoble, je ne suis pas très clever, mais je know that c'est tres important de create les PDFs. Maintenant ici comes Microsoft along, et finalement accepts que "Save As PDF" est une bon ideé pour Microsoft Office! Quel tourne about est that! Oui, c'est completement vrai, que dans le next version d'Office nous will be able to create les PDFs de Microsoft et certainement les PDFs de Excel, Word,

Pouvoirpoint et le rest, will entre dans les print workflows. Quel horreur des horreurs!.

Qu'est-ce que les prepress personnes will faire?

Avec mes sentiments les plus distinguished et horrifiés,

François de Ciem-Waikay

Etudiant et Cleaneux en Grenoble, France

Driftwood

(Useful stuff washin' in on our shores)

Super Small Flash

Just imagine what a publisher could do with a Flash card that is only 12 x 12 x 1.4 mm big. A memory company called Spansion and co-owned by AMD and Fujitsu is trialling a new Flash memory technology for use in wireless phones, PDAs, digital cameras and MP3 players. This teeny weeny Flash card doesn't only have smallness on its side, it also boasts simplified system integration and enhanced performance.

It means that the mobile media model we've been muttering about will get another boost. Handset manufacturers will be able to meet growing demands for advanced features on wireless products without making them bigger or heavier.

Amir Mashkooi, executive vice president of Spansion's Wireless Solutions Division has said that: "As wireless devices become more and more sophisticated, they require Flash memory solutions that offer increased code and data storage in a package that doesn't increase the form factor of the end product. Just as our initial multi-chip packages helped transform the memory industry by reducing the footprint for system memory, these new solutions represent the next evolution in packaging innovation."

▼ Spansion's new toy combines a system memory package with a logic chip set package. Designers can make pretty much any combination of memory and logic they fancy and rely on simplified testing features to reduce time-to-market and maximise cost efficiency.

For this company, the future is all about developing memory, logic and mass storage for wireless handsets, with prices dependent on how much of each is combined in its solutions. For media professionals this type of technology has tremendous implications, not least for the mobile media model.

Spindocs

(Where the spinner gets spun!)

Quark has a new logo - you've probably seen it; round and green? Fair enough, but does it really warrant over 600 words of press release? We give you the first three paragraphs (and the header which we don't really get). Read 'em and weep:

"Show everyone why I'm different

Publishing leader Quark adopts new logo and identity

DENVER - September 9, 2005 - There's a friendly sign of change at Quark: a new logo and visual identity that signal that the company is leaping forward into the future of creative communications.

"Quark has undergone a major transformation to become more open and customer-focused, and we have a focused vision to go with our new attitude," said acting president Linda Chase. "We now provide the tools to express your innermost creativity, build a brand for your business, work together towards a common goal, or help you sell your product. Many people don't realize how much we've evolved. Our new logo and brand will project the significance of this change to our community around the world."

"Our new logo is one of the most articulate symbols of the new Quark, and I feel proud to have led the team that

worked on it," said Susan Friedman, senior vice president of strategic relations at Quark. "It's a positive sign of change that has re-energized our staff and caught the attention of our customers and partners, who understand that Quark is dedicated to relationships built on trust and mutual goals. There's a positive energy with our customers right now, and they're shaping where this company is going, and how we'll get there."

Sorry, Quark, we do like the new logo (the old one was so not memorable), but "we now provide the tools to express your innermost creativity..."!? Just a bit OTT (Over The Top), no?

Boomerangs

(Your feedback fed back)

We've had lots of odds and ends of mail from readers this month, but we thought we would instead share a few of the comments we've had about our new website. Check it out - www.digitaldots.org. Well done Todd!

*"Love the site - love the recipes!
Looks like bewitched!"*

"Wow -- I really like the site, it looks great and there is so much to look at."

"Just checked the website and it's looking great. Strangely, I found my way to the Direct-to-Plate section almost instantly!"

"A bit unusual, but cool layout and user interface, quite inviting to go deeper and read the articles."

"Nice site, Laurel. Well done."

"I am really pleased that you will start these forums and we will inform our readers of them."

We have also had some favourable phone calls, plus one from a reader who doesn't like the typography or the colours, but he did like the structure.

So, if you haven't already done so, take a look and let us know. We are especially keen to get you involved in the forums! Let us know as well if there is anything else you would like to see on the site.

Say What?

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

This is not, perhaps, strictly speaking a "Say What?" item, rather more a simple "What?" This item appeared on the news pages of the Danish graphic arts trade magazine AGI. We could only guess at what this particular image was supposed to illustrate. Well, actually, we have a fairly decent command of Danish and it turns out the camisole clad Sandra Bullock wannabe had been picked to illustrate the confusion over rules on royalty free images. But of course – breasts and pouting lips are essential to any explanation of the finer points of photo copyright law. We suggest the editor get with the times!

DIGITALFOTO

Forvirringen er total...

⊗ Hvorfor genopfinde det royaltystyfri foto, når begrebet har været opfundet – og brugt (også kommercielt) – i årevis?

Jeg har med stor forundring læst, at et billedbureau igen har opfundet den dybe tallerken. Nye tider inden for royaltystyfri stockfoto er kommet til landet!

En påstand er, at nu lanceres systemet „Betalt efter billedstørrelsen“ inden for royaltystyfri foto. Påstand nummer to var såmænd, at disse royaltystyrie billeder var frigivet til reklame – oven i købet til både kommerciel (?) og redaktionel brug. Det er mere end påstande, for de er faktisk gode nok! Problemet ligger i at lancere det som nye begreber inden for billedbranchen. For netop disse ting har jo været kendetegnet for „licensfrie“ billeder, siden de kom på markedet i 1992.

Fordelen frem for traditionelle „licensbilleder“ er, at du kan investere i en cd med et vist antal motiver på. Eller du kan vælge at købe de ønskede motiver som enkeltbilledet, hvor prisen er afhængig af den størrelse, du bestiller billedet i. Man introducerer altså et begreb, der har været gældende i 13 år.

At disse nye royaltystyrie motiver pludselig er frigivet til reklame – både til redaktionelt og kommercielt brug, er for mig en gåde. Er reklame ikke kommercielt? Har man ikke altid kunne bruge royaltystyrie billeder til redaktionel brug? At være royaltystyfri er jo netop at være fri til brug! For mig at se er disse påstande med til at forvirre begreberne. Derfor vil jeg atter gentage, hvad man må – og ikke må – med royaltystyrie billeder!

Når du har købt og betalt billedet, har du alene brugstretten. Du har ikke eksklusivitet til billedet og må bruge det igen og igen – til forskellige projekter og forskellige kunder. Det er også tilladt at manipulere motivet, sammenkopiere, ændre farver og... Til gengæld må du ikke sælge billedet eller bruge det i pornografiske eller andre anstødelige sammenhænge. Du skal altså ikke forhandle oplagsstørrelse, placering og medie, projektets art, eksklusivitet, genoptryk og så videre. Du skal heller ikke returnere billedet efter brug.

Hvorfor gøre begrebet royaltystyrie billeder sværere end det er? Nemt og enkelt er det – lad det forblive sådant!

55

Må, må ikke...



Expandocs 1

(In this section, we aim to cast some extra light on a particular recent news story.)

Fuji Brillia Pro

For years, processless plate processing was the so-called 'holy grail of printing'. The apparently endless search started to draw to a close with Agfa's introduction last year of chemistry-free Azura plates and Azura has been received with gusto in the market. Now Fuji has announced the Brillia Pro line, and clearly the chemistry-free and processless platesetting grail is well within reach.

There are two plates in the Brillia Pro range – both negative working plates – the Brillia Pro-T thermal and the Brillia Pro-V violet, although the latter is currently a technology rather than a product announcement. This plate will however have comparable performance to the Pro-T thermal plate and both will compare favourably to the performance of Fuji's other digital plate offerings. The production speed of Brillia Pro-V has yet to be announced, but the aim is to be similar to existing violet plates. Run length and on-press performance are also equivalent, so printers won't have to make any compromises in order to move to processless output. It is this "no compromise" message that Fuji is really pushing hard.

The new plates are based on a new micro-etch technology that creates a multi-grain surface capable of better on-press performance than was previously possible with processless plates. Fuji has also developed a high definition emulsion for better quality and a high sensitivity polymerisation technology for fast imaging. These three are the basis of Fuji's "no compromise" claim but Fuji believes the plate has other possible benefits such as improved cost of ownership for platesetters, exposure times close to those of existing pates, quality (these plates can hold 1 to 99% dots and 200 lpi screens), support for FM screening, with dots as small as 10 micron dots possible.

The Brillia Pro-T is a no bake 830nm thermal plate based on the high sensitivity polymerisation technology. It is a drop-in plate developed on press. It is rated for run

lengths of 100,000 and will be available in the first quarter of next year.

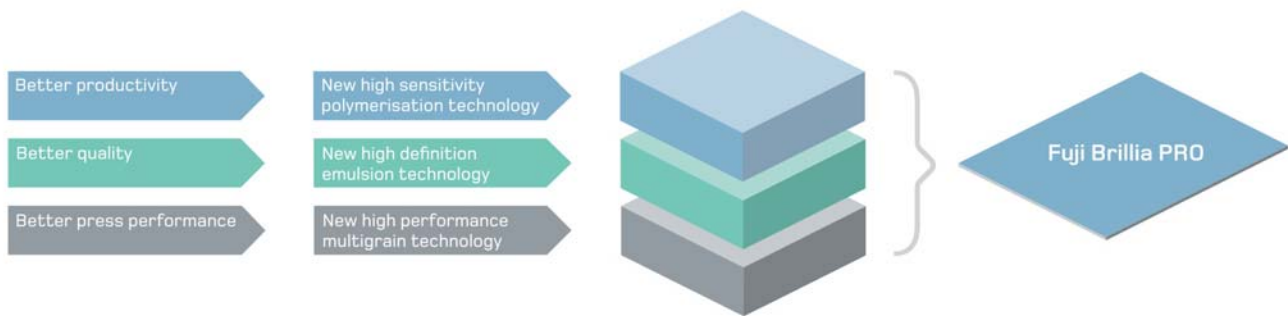
The Brillia Pro-V violet imaging plate will be commercially available one year after the Pro-T and is based on the same technology, but works for runs of around 200,000. The plate also requires gumming, but will be able to print aggressive UV inks without baking, although supporting longer run lengths if baked. Because of the gum processing there is no need for yellow light. The image contrast on the thermal plates Fuji describes as “acceptable” and on the violet as “good.”

The Pro-V plate images at around 405 to 410nm, but the energy requirement has yet to be announced. This processless violet plate depends on a higher powered laser than is currently available, which is why it won't

All existing Luxel users will be able to upgrade their machines to image the new plates. Manufacture of the Pro-T plate will initially be in Japan but eventually will move to other plants, in keeping with Fuji's manufacturing policy. Fuji develops in Japan, and once the product is stable and the manufacturing process is 100% reliable, production may be moved to plants outside Japan.

As fans of the Monty Python film will know, the search for the holy grail is never-ending and finding the secret is much harder than pursuing it. With processless platesetting, the search is over and at Ipex next year we expect this subject to be one of the most explosive topics on the show floor. Not only will processless and chemistry-free plates shake up the CTP markets, they will also reshape the revenue models for traditional consumables suppliers away from plate processing towards press and related

Fuji Brillia PRO no compromise processless plates



be introduced until later. The violet diodes come from Nichia, one of the earliest developers, and the current technology can be driven at much higher powers albeit compromising the life of the diode. A 200 mW diode currently has an estimated two-year life, but higher-powered diodes that last five to ten years are coming along. Fuji expects to see 300 mW within the next couple of years with acceptable life, although they are understandably coy about what exposure the Pro-V plate will need.

Fuji has tested its new plates for throughput on all the major CTP devices on the market but has not yet confirmed the plate volume at which processless plates become economically viable.

chemistries, including direct digital imaging. As Fuji's UK managing director Keith Dalton put it: “Today is the path of many things to come”.

Acrobites

(Something to get your teeth into)

ML

Moore's Law. Well, it isn't really an acronym but since it's forty years since Intel cofounder Gordon Moore came up with his law, we thought you'd like to know more about it. According to Moore's Law, the number of transistors on a chip roughly doubles every two years, so the scale gets smaller and smaller. He hasn't been far wrong so far, and Intel's current technology can print lines as small as a virus and about 1,000th thinner than a human hair. Every rise in transistor counts adds capacity for greater device complexity and integrated capabilities.

In 2003 Mr. Moore estimated that the number of transistors shipped in a year had reached 10,000,000,000,000,000,000,000. And that number is apparently around ten times as many ants as there are in the whole world. Next time you see an ant, think processors. Or maybe not. More importantly, consider what each of those processors cost; according to Intel "some people estimate that the price of a transistor is now about the same as that of one printed newspaper character".

WPA

When setting up a WLAN (Wireless Local Area Network), apart from the obvious difficulty of staying awake while doing it, one challenge is how to make a radio wave based network secure. There is even a name for the game of chasing open and unprotected Wi-Fi-networks. It's called "Sniffing" or War-driving. Basically you equip yourself with a laptop and drive around trying to detect a poorly protected wireless network. The latest technology suggested for securing wireless networks is WPA (Wi-Fi Protected Access) which replaces the older and less complete technology WEP (Wired Equivalent Privacy).

Expandocs 2

(In this section, we aim to cast some extra light on a particular recent news story.)

Xerox Docucolor 250

The new duplex Docucolor 240/250 sits at the top end of Xerox's mid range products and at the bottom of its production machines. With this introduction, Xerox is doing rather more than just peddling yet another new printer. This compact cross-over product is a solid bridge between the office and production markets, eroding the boundary between the two. The Docucolor 250 is a multi-function printer with inline finishing, a range of modular options called Smartkits, and numerous customer replaceable parts. The duty cycle is 40,000 per month and the machine costs £45,000 (list). There is an "average" click charge of 6p per print which includes the front-end technical support, toner and staples, but not paper or power. The printer outputs sheets from A5 to A3, with capacity for 3200 sheets and an option for a 1500 sheet high capacity feeder. There is also an inbuilt document scanner and with decurlers built in. The Docucolor 250 can print on a range of stocks up to 350 gsm.

This printer is aimed at in-plant customers and prints 50 pages per minute (ppm) colour and 65ppm mono, or 40 ppm colour and 55 ppm mono for the 240. You can load toner while the machine is running, at a resolution Xerox claims is 2400 x 2400 dpi. Xerox's claim is based on the fact that the Docucolor 250 uses a VCSEL (Vertical Cavity Surface-Emitting Laser) which produces 32 beams of light to generate the page image, rather than the usual two found in such devices as the Docucolor 12. VCSELs are designed for industrial and sensor applications, with stable output power and low noise. Such lasers are capable of high speed modulation at low operating current and whereas conventional lasers imaging at 600 x 600 dpi can address 360,000 dots within a square inch, a VCSEL laser with 32 beams can address 5,760,000 dots in the same area with no interpolation. The dots are also placed with greater precision and consistency, both inch for inch and page for page. This certainly shows in the Docucolor 250's output quality.

▼
 Apart from using this new fangled laser, Xerox is laying down Emulsion Aggregate toner in the Docucolor 250 instead of conventional toner. EA toners are chemically grown, rather than being ground up from a solid block, so they can have a uniform particle size with smaller particles overall. Xerox' EA toner particle size is 5.7 microns, giving each particle a surface area of 102 μm^2 and therefore

Creo Spire CXP 250 includes Creo's Darwin technology, so it supports variable data printing. It also includes Acrobat 6.0 and imposition tools for basic production management with basic JDF compliance. However this RIP's great strength is in colour management and variable data printing. Spire CXP 250 is optimised for the Docucolor 250, so it doesn't support high-end machines. The Xerox/



substantially greater colour brightness. EA toner requires no fuser oil, so overall the image is flatter and less shiny, although page images can be "glossed up".

The new Docucolor gives Xerox customers an entry-level machine that can be carefully tailored according to their application needs. The machine can be supplied with one of three front ends: the Creo (or is that Kodak?) Spire CX250, Xerox's own Freeflow DocuSP or the EFI Fiery EXP250.

Spire combination (and that is of course not X-Spire) is best for markets where colour is the norm and production demands are relatively ambitious, particularly for variable data output.

The EFI Fiery EXP250 front end supports various optional modules, such as booklet making, and includes EFI Im-
 pose and advanced colour capabilities. This is the front-end most likely to be attractive for entry level graphic arts applications, with strong colour management and support for ICC profiles, and device profiling. An Eyeone

▼ spectrophotometer and relatively powerful colour management tools are included.

The Xerox Freeflow DXP 250 will be attractive for companies who want a common controller for both mono and basic colour workflows, plus variable data printing support. The Spire and Fiery front ends are available this month, along with the Docucolor 250, and the Docu SP front-end will come on the market in December. The delay is because Xerox is working on improved colour management, while simultaneously migrating its software to Sun workstations based on AMD processors rather than Sparc chips. As yet this software does not include any JDF compliant elements.

Xerox expects to sell 400 of these machines in Europe this year and is positioning the DC 250 against engines from Konica and Ricoh, as well as the Canon 3100, which is probably its closest competitor.

Xerox has invested hugely in the digital colour print market of late, not least because of fantastic predictions by enthusiastic consultants such as Interquest and IDC. The latter group apparently reckons that the multi functional printer market in Europe will be worth \$3.889 billion by 2009. Such precision and such a wonderfully amorphous device category! But whether one considers these sorts of numbers meaningful or not, Xerox' investment and commitment to this market is definitely meaningful. The new Docucolors are part of a steady continuum of colour-capable output devices suitable for print applications ranging from the very basic to seriously demanding, and suiting the budgets to match.

The Docucolor 250 is an impressive little beast that will be well received in its target markets. However it will also be relevant for emerging markets for digital print applications, combining speed, quality and price in what, for many, will be an almost irresistible package: small and pertly, if not quite perfectly, formed.



Placas Catalanas – something for everyone

Although there are many companies supplying digital plates around the world, there are really only a few dedicated digital plate manufacturers. By far the smallest of these is a Spanish company founded in 1985 and still based at its present location near Barcelona. Compared to the booming voices of its competitors Ipagsa is a mere whisper. And yet somehow this tiny player successfully competes in a world of mass production and commodity supply.

In the Beginning

Ipagsa has its origins as a subsidiary of Italian consumables manufacturer Chemigraf. With 16 people at its Rubi site near Barcelona, it was originally set up to provide competitively priced positive analogue printing plates. Eighteen months after the division was set up, a group of the shareholders broke away to found Ipagsa as an independent entity. In 1996 and 2001 further restructurings occurred, leaving Ipagsa solely in the hands of its present owner, Mr. Bruno Ferrari. He has been with the company since it was originally established as a subsidiary of Chemigraf.

Today turnover comes exclusively from high quality plates and associated chemistries. All Ipagsa's plates have their own developing chemistry, although the plates are also compatible with the majority of the competitor's chemistries. Current year revenues are estimated to be around €48 million, to which digital plates will contribute sixty percent and conventional forty percent. The volume of digital plates is rising, as the profitability of conventional plates falls. In 2003 the ratio was 20/80 and in 2004 50/50. The Ipagsa factory has two production lines with a maximum capacity of 12 to 13 million square metres of plates annually. Tiny it may be, but Ipagsa is the only independent European producer of digital CTP plates unaligned with specific equipment. This is an important factor in its success.

Going Digital

Having recognised that its future was in digital plates, since 1999 Ipagsa has been shifting production focus from conventional to digital plates, coming to market with its first digital plate in 2002. There are now 160 people working at the Ipagsa factory, producing both conventional positive and digital positive plates. Digital technology is now Ipagsa's primary development base, despite the rising stock of the Basysprint technology for digitally imaging conventional plates.

As part of the new editions of our Buyer's Guides, we are taking an in-depth look at the plate manufacturers of this world. We begin with Ipagsa, the smallest one. The other manufacturers will be profiled in the months to come.

This article is produced as part of an international graphic arts industry collaboration between Digital Dots, its publishing partners and its clients.

It is part of a special project to address business and technology issues crucial to digital print media production. The series of educational articles explains print media technologies, business issues and market drivers for print media production, in both existing and new markets. These articles will be published as a series of individual Buyer's Guides due for print publication in April 2006.

- *The Buyer's Guide to JDF*
- *The Buyer's Guide to Colour Management & Proofing*
- *The Buyer's Guide to Digital Printing & Direct Imaging Presses*
- *The Buyer's Guide to CTP*
- *The Buyer's Guide to Preproduction Data Management & Quality Control*

Further information is available at the Digital Dots website: www.digitaldots.org

This project is supported by several organisations, including the following:



▼ Markets

Ipagsa has a presence in some fifty countries worldwide, a big drop from the more than 65 it previously served. The company has wisely chosen to withdraw from markets where it cannot viably compete because of their economic volatility, such as in Asia and South America. As much as possible, Ipagsa strives to serve the worldwide printing business on the basis of local and personalised services, competitive price per square metre, efficient supply, consistent quality, prompt and consistent delivery, responsive customer services and flexible plate sizes.

Ipagsa sells direct to market in Spain and Portugal, which contribute around 25% to sales, and through dealers and distributors in other markets. Ipagsa's independence is both a liability, since it cannot offer hardware and consumables deals, and an asset, because most Ipagsa dealers and distributors also sell platesetters and can offer customers bundled deals. This considerably helps Ipagsa plates to compete with products from Agfa, Fuji and Kodak, which can be sold as combined hardware and consumables contracts. It may be limited when it comes to bundling options, but Ipagsa's independence gives it considerable latitude for working with many platesetter developers.

It seems that Ipagsa maintains good relationships with companies such as Heidelberg, Screen, Lüscher, and other non-aligned platesetter developers and sells and supports, we believe, some 2200 different plate sizes, including several thicknesses. Although 85 percent of Ipagsa's production is estimated to be standard, the 15 percent of it that is not is essentially a speciality market, where Ipagsa can compete on the basis of meeting very specific customer needs. The company has a direct and close relationship with its customers, and its support for weird and wonderful formats could indirectly benefit the competition, as well as Ipagsa's platesetter partners. The availability of plates for all the odd sized presses installed around the world, means that, even though their press formats are in a class of their own, for these printers there is no barrier to CTP investment.

This service orientation drives Ipagsa's business ethic. A strong service orientation means that even very small customers can dictate how they do business with a company and this may not always be possible with other larger manufacturers. Ipagsa may be miniscule in comparison to the competition, but it has way fewer layers of management and operations to manage, making it easier for customers to negotiate terms. This could help Ipagsa considerably when it comes to price competitiveness, particularly for special requirements, or during times of high raw materials costs.

Of course the ease for customers of doing business with Ipagsa has to be offset against the company's limited manufacturing facilities. Ipagsa's production line is relatively slow, but it has ample latitude for quality control. Also Ipagsa has been at its present site for over 17 years so the factory is bought and paid for, and there is no need for it to make a specific

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Ipagsa's Top Table and Laurel Brunner.

▼ contribution to investment returns. The present site is now at capacity, but Ipagsa has access to a further 30 square hectares of land should it choose to extend its manufacturing.

Products

Ipagsa has two conventional plates, some 40% of its manufacturing output, one for European markets which generate the bulk of conventional plate revenues for the company, and the other for Asia, a passive market for Ipagsa. Ipagsa also has two thermal positive CTP plates qualified on various platesetters.

The Rubi T50 thermal plate is designed for platesetters imaging at 830nm and has an energy requirement of 170mJ/cm. It is named after Ipagsa's neighbourhood near to Barcelona and was introduced in 2002. Rubi was originally a Roman settlement and, like the Romans, the Rubi T50 plate is known for its robustness and consistency. Customers like it for its excellent resolution (Kodak has certified this plate for its Staccato 20 screening technology) and resilience, and the fact that it can handle very high run lengths of well over 300,000 without treatment, one million baked, even with UV inks. It is understandably popular in markets using UV inks and although it is a slow imaging plate it is, according to Jonathan Bentley, responsible for Ipagsa's research and development, "indestructible".

Ipagsa has recently introduced a second thermal plate, the Arte IP-21, for markets needing faster imaging, such as commercial printing. Arte IP-21 is also for 830 nm imagers (energy required is 130mJ/cm), and competes most directly with Agfa's P970 and Kodak's Electra Excel, and is suitable for run lengths of up to some 150,000 impressions, much more when baked. With Arte, Ipagsa sacrifices run length for speed, so the plate is a logical complement to the Rubi. Arte technology is also the basis for Ipagsa's future developments and for markets where run length is less important than speed. Markets everywhere are seeing falling run lengths and the need for more frequent plate production so Ipagsa's compromise is a sensible one. Arte could also provide a good foundation for a chemistry-free plate in the future. A chemistry-free plate, such as Agfa's Azura, relies on water rather than alkaline chemicals for its development. It could be possible for Ipagsa to use some variant of the Arte's patented components to make such a plate.

The current products are first generation plates, and Jonathan Bentley and his team, who are keeping up with all new technologies, believe that chemistry-free or processless plates will dominate in the near future. As is the case with its competitors, Ipagsa's product development strives to anticipate changes in imaging technology and customer requirements, keeping close to local markets and its customers' business requirements. This close relationship with customers is key characteristic of Ipagsa's business approach, however it could be a limiting factor when it comes to product development.



Ipagsa's Jonathan Bentley.

The current products are first generation plates, and Jonathan Bentley and his team, who are keeping up with all new technologies, believe that chemistry-free or processless plates will dominate in the near future.

Despite its close relationships with customers, Ipagsa can't afford to jeopardise plate quality. It's crucial that the company's plates are fully tested, endorsed and fully qualified by platesetter manufacturers, especially for productivity, a platesetter's key performance metric. It is also vitally important that Ipagsa's technology and associated patents are bombproof.

Fifty percent of Ipagsa's research and development effort goes into its team of six research people and into intellectual property development. This is 2.5 percent of turnover for specific research and development of new plate technologies. For the balance Ipagsa has numerous partnerships with research organisations and in universities and, given that Agfa, Fuji and Kodak have over 3000 patents for a handful of plates, intellectual property is very important. For a company as small as Ipagsa, both intellectual property protection and infringement perspectives need to be flawless, as do the details of its contractual relationships.

Future

In a worldwide market for printing plates estimated to be around 475 million square metres, Ipagsa's capacity is less than 3%, so there is room for them to support themselves. Mr Ferrari can place his 12 million square metres in this market without too much trouble and has no ambitions to shift focus elsewhere. The foundation of Ipagsa's future lies in its ability to develop and manufacture products that customers will want to buy enough of to keep the factory busy. It currently operates around the clock, every day of the week.

Rising raw materials and energy costs, as well as margin erosion, undermine everyone's ability to compete, both large and small manufacturers. Ipagsa, though, is a small company and well placed to respond rapidly to changing commercial environments. It has no debt, which could be the company's greatest asset of all in times of rising raw materials costs. Mr. Ferrari's view of the future is that the business is healthy and ticking over. The basis of his business is service, price and quality and within these three lie the basis of the company's future, especially in the context of what Mr. Ferrari calls the "China Syndrome". Clearly Ipagsa must continue to keep its eye on the market and develop its digital offerings. Chemistry-free or processless plates is the most obvious direction for this, but can Ipagsa come up with products to compete with Agfa's Azura? And further along, will chemistry-free plates be competitive with processless plates such as the very impressive new Brillia series plates from Fuji and Kodak's Thermal Direct? These are questions only the market will answer. But the market is large and varied, so as long as Jonathan Bentley and his team can come up with competitive products, there will be room for Ipagsa. When giants bang their fists, squabbling over the loaves and who gets to slice them, there are always enough breadcrumbs for the nimble and bright-eyed birds on the ground.

– Laurel Brunner



Ipagsa HQ in Barcelona.



Ipagsa's Bruno Ferrari.

The pudding

Since our review in Spindrift 2-7 (September 2004) of hard copy proofers, we've continued to test new output combinations. The latest combinations to be put through their paces are the Efi Colorproof XF with output to an Epson Stylus Pro 4000, Oris' Color Tuner with output to a Canon BJ W2200, and the Proofmaster from Perfectproof, also with output to the Epson Stylus Pro 4000. As in previous test rounds we use the ECI's (European Colour Initiative) Altona Test Suite.

Efi Colorproof XF

When Efi bought Best, one of the first things they decided to do was to improve the Best Color user interface to make it more user-friendly and intuitive, something they succeeded with. EFI also replaced Artifex's cloned Postscript interpreter with Adobe Postscript CPSI – of course Efi would only use the real thing.

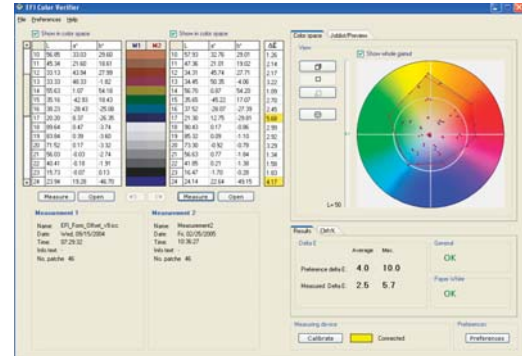
The Efi Colorproof XF RIP server has to be installed on a Windows machine, but the Job Monitor client software can run on both Mac and PC. Pre-configured hot folders make it easy to automate accurate colour output. If a user prefers not to use the drag and drop model, he or she can still choose pre-configured output queues on a Mac or a PC.

Efi Colorproof XF now has a clear modular build, which means that the customer can buy a very basic version to start off with, and very easily upgrade when more functionality is required. In fact, all the modules are on the CD and therefore are installed already. To access them you need to pay for additional keys to unlock the required modules, so upgrading is really smooth. Among the options are support for more output queues and types of printers, extended support for handling sports colours, dot based proofing and calculation of CIP4/PPF data.

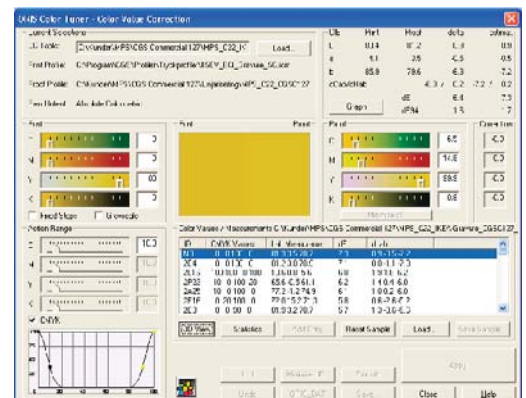
Efi Colorproof XF by default includes the FOGRA media wedge on output, to help verify the proof which, in our test, was printed on an Epson Stylus Pro 4000. We used the Efi Gravure Proof proofing paper, which has a paper whiteness fairly close to that of the offset paper we wanted to simulate. The average deviation measured was ΔE 2.5, well below FOGRA's suggested reference of ΔE 4.

Oris Color Tuner 5.1

CGS (Computer Graphic Systems) has a range of products related to colour management and colour editing. There are several products in the Oris Digital Proofing Suite. Oris Color Tuner is the RIP server for a range of output devices.



With Efi Colorproof XF it's possible to verify the proof by measuring a control strip from FOGRA with a spectrophotometer. This is a quick way to check if you are within tolerances.



When the calibration is finished, which is an iterative process in Oris ColorTuner, it's possible to fine tune the proofer manually if needed.

▼ The latest version, version 5.1, lets users create a reference master profile for all the printers in the workflow. This makes it easier and faster to maintain the exact same output result on several printers used for proofing. The printing devices just need to be re-linearised now and then, which is much faster than generating a completely new ICC profile. CGS has shown us examples where two different printers only differ ΔE 0.6 between them when measuring against the FOGRA media wedge. Colour differences below ΔE 1 are generally considered to be impossible for the human eye to detect. In our test, the average deviation when printing the proof on a Canon BJ W2200 was ΔE 1.9, which is an excellent result.

The new version of Color Tuner also features enhanced performance and speed. This is in part thanks to the capacity to build and save colour tables for colour transformations commonly used in the workflow. This makes a conversion from, say, the colour space of web offset to rotogravure fast and accurate.

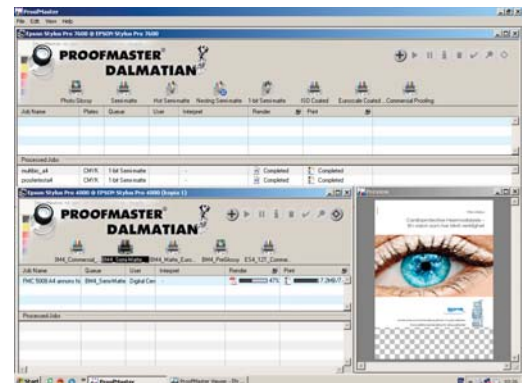
The Oris Color Tuner RIP server runs under Windows, with support for both Mac and PC clients. CGS also offers a simplified version of its software called Color Tuner Personal Edition running under Mac OS X. We haven't tested that version, but it uses the same colour engine as the Windows version of Color Tuner, so it should be possible to achieve the same result.

One often overlooked influence on the result of the output from a certain proofing device is the paper used. Many paper types contain optical brighteners, which may not be present in the actual paper stock used for final print production. To overcome this problem CGS has a range of proofing papers manufactured for its customers, and is about to launch a proofing paper without optical brighteners. CGS hopes that this will help their costumers achieve even more accurate proofs, no longer needing to simulate the paper whiteness.

Perfectproof Proofmaster

Perfectproof is a Belgian company with offices in the US as well. The Proofmaster proofing solution consists of a range of versions where the most extended one, the bizarrely named Proofmaster Dalmatian, supports proofing of bitmap/screened data on top of conventional digital proofing and softproofing.

The user interface is quite simple and straightforward and the way linearisation and calibration is done gives, in our view, a very good rendition of smooth graduated tints especially. To ensure that proofs made at a remote site are accurate, Perfectproof has a Certified Proof utility whereby the user measures the FOGRA media wedge on the proof with a spectrophotometer and checks the result against the tolerances defined for the proofs. This is an increasingly common procedure for developers of hard copy proofing systems.



Each printing or proofing process has a dedicated print queue in Perfectproof ProofMaster. In this print queue the ICC-profile for the proofer itself is combined with that of the printing process, to achieve a perfect match.

Our test results:

Perfectproof Proofmaster (printed on an Epson Stylus Pro 4000): Average deviation was ΔE 1.7

Oris Color Tuner (printed on a Canon BJ W2200): Average deviation was ΔE 1.9

Efi Colorproof XF (printed on an Epson Stylus Pro 4000): Average deviation ΔE 2.5



The average deviation in our test was $\Delta E 1.7$, an excellent result. The page was printed on an Epson Stylus Pro 4000.

The Proofmaster RIP server is available for both the Mac OS 10 and Windows operating systems. Perfectproof offers a range of its own proofing papers.

– **Paul Lindström**



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