

drupa 2012: new newspaper products

In the following, we have summarised some of the most important innovations shown at drupa for the newspaper area (exhibitors in alphabetical order).

Affeldt

The new Affeldt 50 Uni 25 automatic film-wrapping system offers a performance of 50 bundles per minute and works with a servo-controlled sealing system, without bundle stop.. The compact press is operated by means of a touch panel.



Agfa

The Advantage N imager is now obtainable in two new high-speed versions: **N-PL HS** and **N-TR HS** (TR stands for trolley). The plate supply directly from the pallet (the photo shows the inside of the N-PL) permits automatic exposure of up to 6000 plates (2 x 3000 single or 3000 double truck plates) without reloading. The high-speed models can expose up to 350 plates per hour. The imager was demonstrated in conjunction with the N94-VCF chemical-free violet plate and VXCF 85 rinsing unit..



Several new Arikitek workflow components (presented for the first time at IFRA Expo 2011) have been designed to facilitate newspaper workflows. Thus **Arikitek Portal** permits working together with customers who upload material via the Internet, softproof pages and give OK to print themselves. "The new developments we've created for our Arikitek family of workflow tools demonstrate Agfa Graphics' commitment to the newspaper market around the world," said Andy Grant, Global Director of Software, Agfa Graphics.

Agfa :**Arkitex Eversify** brings the news to mobile devices. Agfa Graphic's cloud-based HTML-5 solution publishes newspaper content on a wide variety of tablets and smart phones. It automatically gathers content, formats it for all mobile devices simultaneously, updates content, allows normal editing and publishing features—easily and securely using Agfa Graphics' cloud computing software and with minimal investment—all while maintaining the look and feel of the brand.

For the reader's experience :Arkitex Eversify provides features such as:

- Integration with social media (Facebook and Twitter) allows your readers to promote your brand.
- Complete issue searching allows readers to quickly locate content of interest via keywords.
- Clear navigation information allows readers to easily navigate their way through your content
- Connection to live content allows you to provide your readers with up to date information.

CGS

CGS are now working with ColorLogic who are well known for their high quality direct link ICC colour profiles. The CGS Oris has been extended. The **CGS Oris Press Matcher Web** allows very different systems to be colorimetrically matched to a common standard. The **CGS Oris Color Tuner Web** enables printed and softproofs to be generated by a single application. The complete application combines colour management, high throughput and special proofing requirements for different media.

Dalim

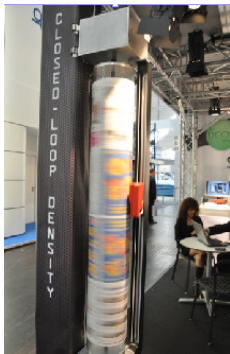
The **Dalim DIALOGUE Engine** now supports the Just Normlicht viewing booth, to allow better control when using soft proofing during a press check. With a USB interface, when a user opens a file in the DIALOGUE Engine, the system will control the brightness of the viewing cabinet – a critical parameter when conducting a press check.

The **Dalim ES 3** (Enterprise Solution) is a set of business and production management tools that have been given a redesigned user interface that makes it easier to access, manage, control, organise and sort projects and files. A PDF enhancement option is available.

DCOS

The Swedish DCOS company presented the **DRCS Inspection System** that uses 4th generation intelligent scanners for closed-loop register and density control: CTC4 (colour register), PTC4 (cut-off register), CRC (colour density colour register control by the same device).

The company offers also retrofit services, such as upgrades of presses, drives and controls, in accordance with the individual requirements of the client.



EAE

As a new function of its colour density control system, EAE presented at drupa 2012 the automatic control of damping solution in order to keep the ink/water balance stable. EAE also pointed out that loop can be used for web inspection as well. A group of interested visitors took the opportunity to see loop in use at the printing centre at the printing centre of the Druck- und Verlagshaus Frankfurt am Maine in Neu-Isenburg.

Elpical

Elpical Organic Imaging, which brings high quality image enhancement to a wide range of small-scale users. The new business model gives photographers, freelancers, designers and design agencies access to Elpical's proficient Automatic Image Processing (AIP) software. The "organic" software concept is to support the publisher's or the user's preference for:

- Skin tones, natural green and blue colours
- Ability to adjust to the style and appeal of the magazine, without stifling creativity.

The AIP technology is based on the mature Claro Premedia technology but as a pay-per-use model. The software is download for free, and after a test of up to 250 images, the user pays between 10-15 cents per image with a maximum of 5000 images per month.

Organic Imaging is not "cloud-based" but a desktop-based operation as AIP calls for significant computer processing power and file sizes tend to be large, particularly in commercial magazine publishing. Cost savings using AIP are typically 5 minutes per image, which means 5-10c per image, so that a rapid return on investment can be expected.

Ferag

Ferag presented new, low-cost products designed to allow even smaller newspapers to take the step from manual to machine inserting, and therefore increase their performance and cut costs. This is how the new Ferag **MiniSert** inserting solution will look (photo): An animated feature shown on the big screen illustrated how the system will be constructed and operate. It is hoped to have the finished product ready to show in time for the World Publishing Expo in Frankfurt at the end of October.



Live demonstrations were given on the Ferag stand of an inserting and finishing line that, besides familiar aggregates, also included two new additional modules: With **TapeFix** (a module positioned at the infeed to the EasySert), assembled inserts are held together by adhesive strips before being inserted into a newspaper copy. With the **Accraply** application module (from the WRH Marketing JobFolio range) that can be integrated before the infeed to the JobStack 90 compensating stacker, MemoStick advertising messages can be simply applied offline to newspapers.



RetroFit is a new product within the ValuePlus service package. It was developed in cooperation between WRH Marketing AG and Ferag AG. The offered services include requirement analyses, standard or customised conversion kits, replacement parts service, maintenance and support contracts. RetroFit services can be applied to individual components (conversion kits) or as a project to an entire production system.

Fujifilm

With the Fujifilm compact JetPress W, the web is turned in the printing system to print the reverse side. The resolution is at present 600 x 600 dpi (a version with 1200 x 1200 dpi is reported to be under preparation). The system uses Fujifilm's own inks (Vividia). Maximum production speed is 127 m per minute. The press is scheduled to become available at the end of 2012.



Fujifilm **XMF Color Path** is a cloud-based colour management system for colour reproduction in accordance with ISO 12647 across a wide range of printing system.

Fujifilm **XMF Color Path Sync** generates device-link ICC profiles and ISO characteristic curves so that printers can rapidly achieve compliance to the ISO 12647 standard.

Goss

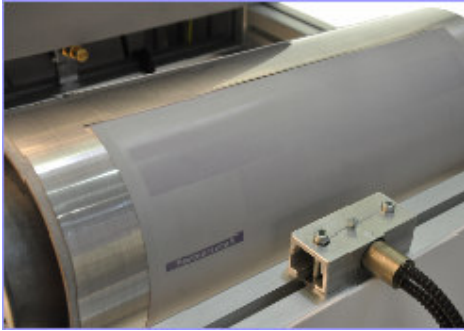
Launched at last year's IFRA Expo, the new compact Goss **Colorliner CPS** press was shown for the first time at drupa (photo left). This press, designed for coldset, heatset or hybrid production with fast production changeover for newspaper and semi-commercial applications, can be supplied as a double-width or triple-width version and achieves production speeds up to 90,000 copies/h. The functions of the new CPS include Autoplate automatic plate change as well as automatic blanket washing systems. The four-high tower on display, with a height of 4.50 m, is destined for delivery to the first buyer, D.C. Thomson & Company in Scotland.

Also on show on the Goss stand was a printing tower of the new **Magnum HPS** single-width, one-plate-around (2/1) newspaper press (right). This newly-developed model complements the Magnum series and was designed especially for markets in which single-width presses are successful (Asia, Near East, Africa). According to the manufacturer, the HPS combines the flexibility of single-circumference presses with a production capacity (up to 70,000 copies/h), such as is familiar from double-circumference presses.



grafikontrol

Besides the familiar CR colour and cut-off register systems and the spectrodensitometer-based Colorscan- colour control system, grafikontrol informed about a newly developed device for **water layer measurement** directly on the plate). Measurement is done by two sensors that detect the water film on the plate with a precision of 0.2 μm and control it by the closed-loop process. Density and fountain agent controls communicate with one another.



Just Normlicht

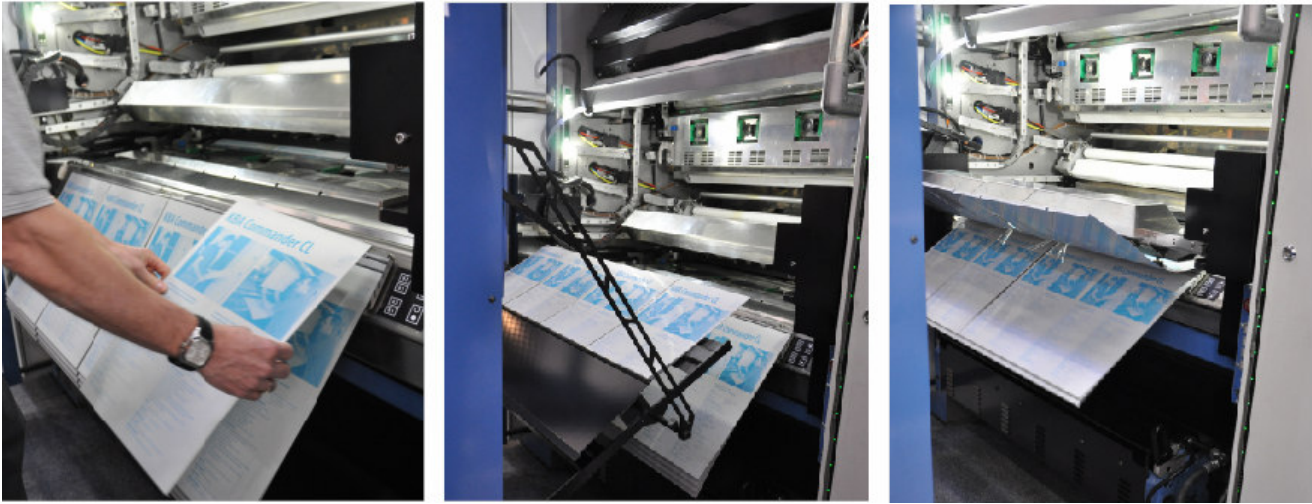
In addition to their established range of fluorescent light viewing booths, the latest LED-based ISO 3664 viewing booth was on show. Just Normlicht LED Color Proof Light has taken several years to develop but the result is a very versatile lighting array that can be remotely programmed to simulate many different CIE standard illuminants such as A or C, D50, D65, D55 or D75. The control extends to selection of the light according to colour temperature or CIE chromaticity coordinates. A selected light setting, even customised lighting, can be saved and recalled at any time as a semi-permanent reference that can span years. In the hybrid version of the booth are three additional TL84 fluorescent lamps that can be used to test metameric matches.

KBA

On display for the first time on the KBA stand was a printing unit belonging to the new, modular **Commander CL** (Classic) newspaper and semi-commercial press combined with the new ErgoTronic control desk. The press cannot be separated and is therefore not quite as compact (H-type printing unit measures about 2.75 m) as the Commander CT and Cortina. The inking system, equipped with three forme rollers, was adopted from the Commander CT. The level of automation depends on the requirements of the individual customer concerned and offers many options. A major attraction was the demonstration of the newly developed plate changing system, of which a semi-automatic and fully automatic version are offered (see images below). Automatic plate change, activated at the control desk, takes about three minutes, thus only one minute longer than on the Commander CT. The Classic version is about 15% lower-priced.



The first orders for the new Commander CL have been received from the Times Union in Albany, a newspaper belonging to the US Hearst Corporation media group, Zeitungsverlag Oberbayern and Oberbayerisches Volksblatt in Rosenheim, both Germany. A further order from Germany is expected to be announced shortly.



From left: The new plates are supplied to the printing unit; the plate-changing device removes the used plates (four at a time) and hangs them on a rack that is then folded away; the new plates are mounted one after another on the top and bottom cylinder.

Obtainable on the stand were also printed samples produced by the coldset process on a Cortina with follow-up varnishing (prevents smearing). The result is comparable with heatset prints. The coating prevents smearing and gives the product a slightly glossy effect. No heatset dryer is required for such production runs; however, an Eltosch air-dryer is used. The printed result is comparable to heatset printing.

Not designed for newspapers, but theoretically suitable for newspaper applications – and certainly of interest to this area – is the first KBA digital web-fed press: **RotaJet 76**, that was shown to the public for the first time at drupa. The press uses water-based pigment inks and achieves a web speed of up to 150 m/min. Maxim web width is 780 mm.



Kodak

As a successor to the PF-N, Kodak has launched its new process-free thermal plate **Sonora News** for newspapers offering a long print run stability. The plate can be run on the press immediately, without development or rinsing.

Kodak chose wobe-team as its partner for the new CTP workflow solution.

Krause-Biagosch

The **JetNet web portal** allows external customers to plan and manage the processing of their print jobs by releasing them remotely.

Landa

The new Landa Nanographic Printing digital printing process attracted a great deal of attention when it was presented several times daily on a printing system equipped with an integrated large-sized touch panel. It works with a special water-based ink, so-called Nanoink, developed by Landa. According to the manufacturer, when used in conjunction with the Nanographic Printing process without drying it is capable of producing especially small and very sharp dots, thus permitting a "never before obtained printing quality". Landa announced cooperation agreements with press manufacturers (Komori, manroland, Heidelberg) who have expressed their intention to integrate the new technology into their printing systems or develop new systems based on it. The newspaper market does not belong to the target markets.



manroland web systems

More than just an impression of the innovative design of the **Colorman e:line** was provided by the side frame of a printing unit displayed on the drupa stand. An unusual feature is especially the material used: plastic instead of metal. The bright contours are not just an attractive eye-catcher, they can also take on different colours in order to indicate a specific press status: in print operation, automatic plate change, maintenance, etc.



But the focus of the manroland web systems presentation was firmly on the operating concept: ControlCenter is a control desk completely without buttons. It is operated via a number of different touch screen interfaces: the **SlidePad** controls ink, water and register. It is moved back and forth on a rail below the support surface for the proof copy (ControlDesk), the displayed areas at all times correspond to those of the above page. A large display screen (right) provides an overview of all components and operating status integrated into the printnetwork production control system, thus also permitting system direct intuitive control. In addition, there is a **MobilePad**, the mobile control desk version in the iPad design linked via WLAN with the central control desk. For example, the operator can take it along if adjustments must be done in the folder superstructure at the time of production changeover, which is reported to help reduce waste. **UnitPad**, a portable control, is obtainable for maintenance jobs and can be connected to every printing unit.



Manugraph M 360

The latest addition to the newspaper press programme of Manugraph, the Indian press manufacturer, is the single-width, single-circumference (2/1) **M 360** that offers an output of up to 36,000 copies/h.



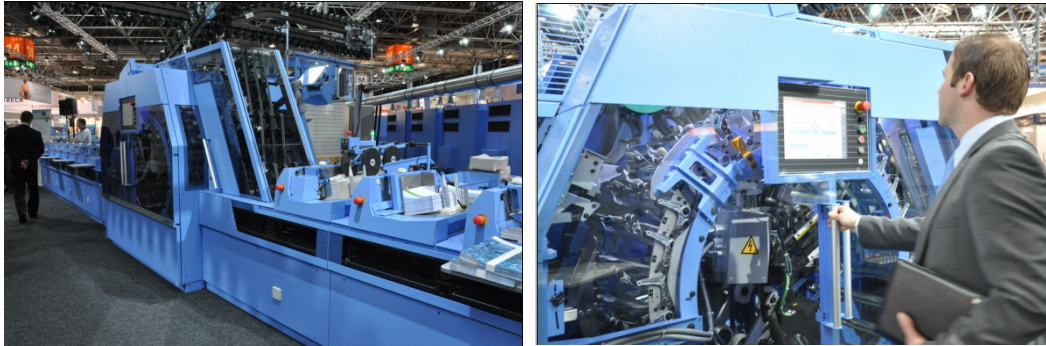
Mosca

SoniXs Evolution is a new generation of strapping machines that, as a standard feature, work with SoniXs technology (ultra-sound strap sealing), causing lower emissions and with low maintenance requirements. The automatic system has CE certification and requires neither a protective enclosure nor light barriers.

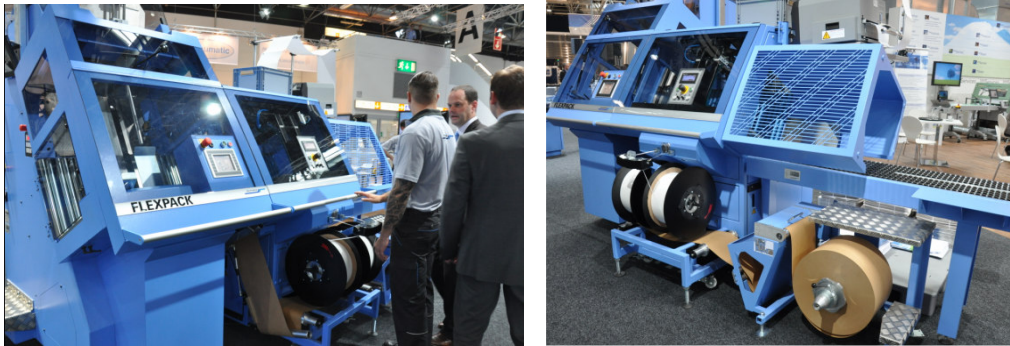


Müller Martini

Shown for the first time was the new **FlexLiner** inserting system. The system's insert gathering line can be equipped with up to 30 stations, permitting processing of up to three (different) products simultaneously. According to the manufacturer, this offers new possibilities for product assembly. For example, up to two inserts can be added to a main product FlexAd). By means of the Co-Mailing process, up to three different titles can be collected for distribution together. The system satisfies the demands for distinction by distribution zones, while allowing the combination of a large number of different inserts and preprints. The inserting wheel can be observed through a glass front and is easily accessible for maintenance. Flexliner can process different formats and offers automatic format changeover. The Müller Martini Mailroom Production Control (MPC) coordinates the feeder allocation on the FlexLiner and assists the operating personnel in ensuring that the products are assembled correctly.

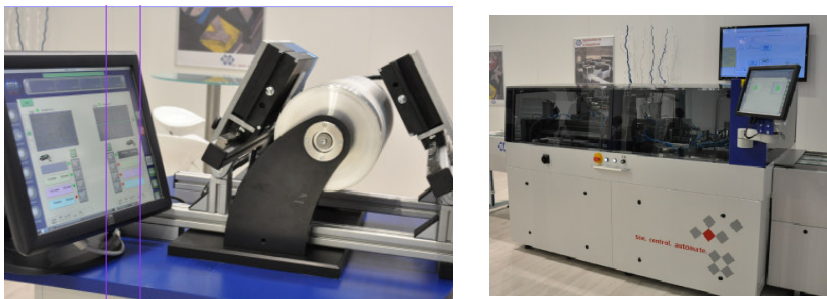


The second new product is **FlexPack**, a compact bundling and wrapping line developed for processing highly regionalised products with many inserts. FlexPack combines a number of functions in one machine: careful bundle building, bottom sheet and top sheet (including addressing) feeding and bundle strapping with two parallel plastic tapes in a single pass – all done in a very confined space.



Nela

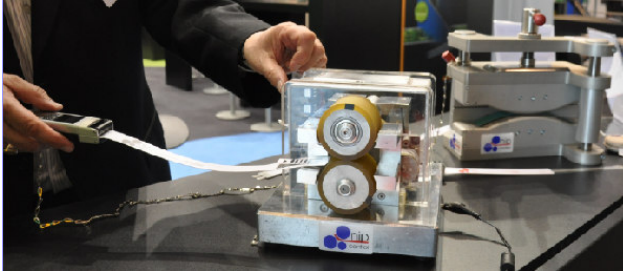
Live demonstrations were given on the Nela stand of the **OPRC** (OnPress Register Control) system for cut-off and colour register control in the press. According to the manufacturer, the high-resolution digital camera, of which the lens is protected against dust and that requires almost no maintenance, detects very small register marks. The system works completely automatically, but the operator has the possibility to intervene in the process via a touch screen to define manual settings as targets for the system.



Launched at drupa was the register punching and bending system **VCPEvolution HS 800** for single and double truck plates equipped with video control positioning. It offers a high throughput of more than 420 plates per hour. Edge-bending is done in accordance with customer specifications.

Nip Control

Nip Control presented its **Pressure Indicator** as a world first. This is a sensor sheet that can be used to establish the impression pressure between the blanket and plate cylinders quickly and simply. As soon as the sheet is drawn into the roller gap, the impression pressure is shown on the display. Up to now it has only been possible to establish the height of the blanket, which does not permit any clear conclusions to be made concerning the impression pressure.



Stefan Wegdell, Managing Director of Nip Control, demonstrated measurement of the printing gap with a sensor sheet (foreground) and of the cylinder impression pressure (background).

Océ

Live demonstrations were given on the Océ (Canon) stand of the newly developed **ColorStream 3700** digital printing system, with complete finishing (from Horizon). The Twin Series model works with the Piezo ink-jet process in which the droplet size can be varied, thus ensuring more consistent colour gradations. ColorStream permits the use of water-based dye inks that are lower cost than pigment inks. A special technology protects the CMY printing heads from drying if production is being done temporarily in black only. The production speed is given as 100 m/min.



Not shown was the newly-developed Océ JetStream 4300 that offers a throughput of 200 m/min. Two such machines will be used by Rivet Presse Edition in France to produce national and regional daily newspapers as well as editions of foreign newspapers.

Presstek



Presstek introduced a waterless thermal printing plate called PearlDry Blue that can be used in sheetfed and web applications, also in newspaper printing. According to Presstek, PearlDry Blue is a chemistry-free plate that can be imaged on 830 nm thermal CTP systems from a range of manufacturers. Its fast imaging allows qualified thermal CTP systems to operate at maximum speed. PearlDry Blue provides daylight handling and operation for up to 8 hours. The non-ablative plate requires only a simple water wash after

imaging. No chemistry, baking or gum is required. It outputs resolution of 1% to 99% dots at 200 lpi (80 l/cm), and stochastic (FM) screening is easily handled. The plate is rated for run lengths up to 100,000 impressions.

Q.I. Press Controls

With **mRC-3D**, Q.I. Press Controls featured a further development of the mRC technology, a “self-cleaning” depth detection camera. In order to avoid manual cleaning of the camera sensor, QIPC positions an anti-static ink mist shield in front of the camera that, in the event of soiling, is automatically renewed from a cartridge (the photo shows the camera without the cartridge). M. DuMont Schauberg, the Cologne-based media group, will be the first user for the mRC-3D technology.

The IDS system for ink density control that works without register marks now also controls the damping water. The new Colorman e:line for the Allgäuer Zeitungsverlag will be equipped with the Q.I. Press Controls IDS (all four webs) ink density control system as well as the mRC+ system for automatic colour and cut-off register control (36 cameras). The first Goss Colorliner CPS for DC Thomson will be equipped also with mRC+ control systems for colour and cut-off register control.



QuadTech

The QuadTech ink control and web inspection system that works with AccuCam now also has the capacity to **control fountain agent metering** and therefore ensure a consistent ink/water balance. QuadTech's Color Control and Web Inspection System with AccuCam is an automated, image-based, closed-loop color control system. The AccuCam system is also improving performance at Herold Druck (Vienna, Austria), and was recently chosen by the Chicago Tribune Company.



Rima System

The stacker/compensating stacker **RS 36S** is suitable for processing newspapers and commercial products in high volumes and different product thicknesses (from four to 96 pages). The products are pre-gathered by two alternating sets of squeeze rollers, lowered with care and transferred to the turntable. Photocells monitor the bundle height, so that the product drop is kept to a minimum. A press ensures that the air between the products can escape and stable bundles are produced. The stacker can be integrated into the Rima System Job Optimizer software. The Postpress Management System controls bundle production by distribution and delivery routes, with the customer data supplied by the production management system.



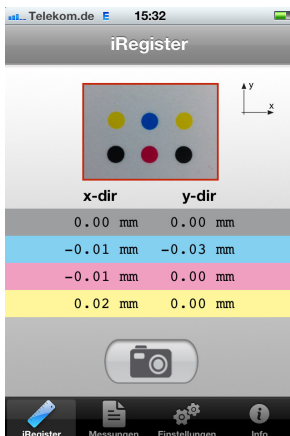
Techkon

The Techkon **SpectroDens Premium** features a more compact design and improved ergonomics. It has a new high resolution colour display and a redesign of the optical geometry that means a more homogeneous illumination of the measurement area. The result is a more accurate measurement, particularly on coarse surfaces. Also incorporated into the redesigned model is a button-activated polarisation filter. The light source can be either tungsten or LED.

Color is measured and shown on the display so that understanding CIE $L^*a^*b^*$ values is now easier than ever before. Using the latest LED technology, the instrument can provide D50 illumination for accurate evaluation of optical brightening agents and fulfills the M0-M3 measuring conditions in accordance with ISO 13655. Lifetime of the new LED illumination is nearly unlimited.

The instrument measure small areas or scan short color strips and step wedges. Tracking wheels on the bottom ensure a straight run. The new instrument can be connected to a WLAN network to send information via wireless data transmission to the computer or, alternatively, through a hardwired USB connection.

The Techkon **iPhone App iRegister Pro** is an Apple iPhone 4 app that can be downloaded from the Apple iTunes AppStore. It costs 80 € and enables the Apple smart phone to measure the 4-colour register accuracy of printed copies that include the Techkon Register Element. For a proper positioning, a holding system for the iPhone is offered, equipped with an additional lens to increase the accuracy of the iPhone camera measurement. The colour register element can be downloaded free of charge from Techkon's web site.



TKS

TKS, the Japanese manufacturer, presented a new 4x1 press. There is a choice between two models that differ by production performance (the **CT5000UDI** achieves 75,000 copies/h, **CT5100UDI** 80,000 copies/h). The first press belonging to this series (CT5000UDI equipped with three towers) is already in use in production at Mathrubhumi Printing and Publishing in India. Announced already at the beginning of drupa was the sale of a single-width CT5100UDI press equipped with ten tower units to the HT Media Group (Hindustan Times), also in India.



Live demonstrations were given of the **TKS JetLeader 1500** digital printing solution that, for example, was used to produce the daily Wall Street Journal. JetLeader 1500 is a so-called Drop-on-Demand ink-jet system that works with water-based pigment ink and reaches a printing speed of to 150 m/min with a resolution of 600 x 600 dpi.





After drupa, the line on display drupa was due to be supplied to the U.S.A. (the customer was not named), where it will be used to produce a wide range of different products, including newspapers. An identical press is scheduled to be run in a one-year test period in Osaka where it will be used to print a part of the Asia edition of the Wall Street Journal. To date, the entire print run of The Wall Street Journal Asia for Japan has been produced in Tokyo and distributed by air and rail.

tph

The Printers House from India showed a four-high tower consisting of four stacked units of the single-width Orient series. **The X-press-50** model can produce up to 50,000 copies/hour.



UPM

The paper manufacturer is offering a cloud-based PDF workflow management application having the functions of approval collaboration, version control, pre-flight checking, collaborative soft proofing and colour optimisation with the GMG ColorServer. Called **UPM ColorCTRL**, it is claimed to be the first of its kind covering the entire process from creating print ready PDF pages to the final, colour accurate print product.

X-Rite

Shown for the first time on the X-Rite stand was the prototype of the **eXact** spectrophotometer (photo). The instrument incorporates the latest touch-and-swipe navigation technology and intuitive software to make colour measurements quick and easy for pressroom personnel, including ways to monitor and control colour the new and emerging ISO standards. The eXact spectrophotometer will be available in September.



i1Pro 2 colour management solutions including the newly enhanced **i1Pro 2** spectrophotometer that provides an even higher level of accuracy, versatility, ergonomics, functionality and value than i1 Pro. Combined with recently released i1Profiler software v1.3, the new i1Pro 2 portfolio meets the unique needs of prepress, digital printing and photography imaging professionals.



X-Rite's new spectrophotometer platforms are equipped with the **X-Rite XRGA** graphic arts standard, to make it quicker and easier for companies and professionals involved in digital production printing to adhere to ISO standards and have confidence that data sent or received from all links in the supply chain is reliable and repeatable.

Presented were also new products from Pantone that expand its colour libraries, plus additional solutions from X-Rite specifically targeted for prepress, print, publishing and converting industries.