

Press acceptance in Mexico

Cartographic, a packaging printer based in Guadalajara, Mexico, installed a KBA Rapida 142 large format sheet-fed offset press in early 2010. During the visit to drupa 2008, when the decision was taken to place the order, the packaging printer made contact with Fogra. On Fogra's stand not only did it gather general information about the institute's services, it also discussed specific options for the acceptance of a new press. The Mexican visitors were accompanied by Manfred Voll, senior expert and consultant to Cartographic, whose long years of professional involvement in Latin America enabled him to provide knowledgeable linguistic support.

The parties to the contract agreed to commission Fogra to carry out a press acceptance in Guadalajara on the basis of the "Technical Guidelines for the Acceptance of Sheet-fed Offset Presses".

On site, the press fully satisfied the specified requirements, in part because of excellent preparation by the press manufacturer and the thorough testing of the press in the factory prior to shipping it to Mexico. It was possible to recommend acceptance of the press

in the course of the concluding discussions on the basis of the evaluation of the series of trials that had been completed on site.

What this acceptance has shown exemplarily is that with good preparation, consultation and organization, the involvement of Fogra experts in over-



seas press acceptances results in a quick conclusion on the production quality and reliability and therefore pays off financially. ┘

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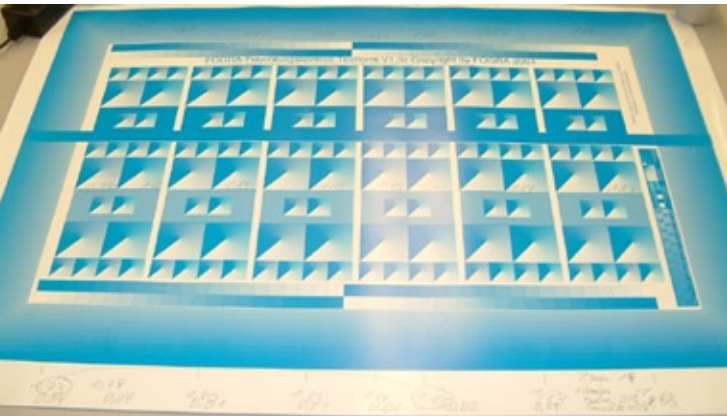
Fogra Symposium

UV Printing User Forum
 16 and 17 November 2010
 [with simultaneous German-English interpreting]

How to get ink and dampening solution in balance [Part 1]

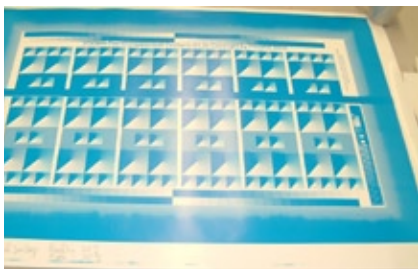
Ulrich Schmitt

Ideal print quality requires a stable balance of ink and dampening solution in all print units. To achieve this, Fogra developed a unique tool – the Fogra Dampening Control Test Forme.



The Fogra Dampening Control Test Forme with over inking and ideal dampening on a small format printing press.

All printers want to set up their presses for the respective print runs as best as possible. Previously, machine set up – and therefore indirectly also the regulation of the balance between ink and dampening solution – was done by measuring ink density and tone value increase of the control patches at the edge of the printed sheet. Up until now,



Optimal result with clear under dampening on a small format printing press.

a suitable tool for testing and documenting the correct print press settings was missing.

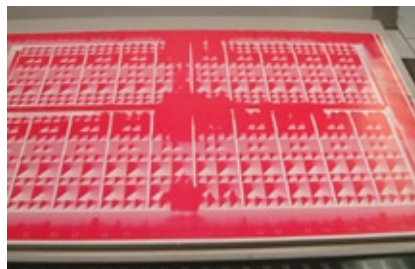
Creating uniform print conditions

Fogra developed a dampening control test form which makes it possible to check and correctly regulate dampening solution application. With the test form and corresponding adjustments, stable printing conditions can be achieved reliably in the presses.

Visual control patches show whether the inking and dampening are nearing critical conditions. Thanks to the test form, printers recognize immediately if the print result will be even across the entire sheet format. In addition they also see how big the differences are from printing unit to printing unit and can correct the settings accordingly.

Identical print test procedures

The print tests take place in all inking units according to the same procedure. First, the solid colors are set with a high density. Here the keys are set



Unfavorable result with under dampening on a midsize printing press.

at the same level and the inking doctor rate is varied. As soon as the target density range has been reached in all zones, dampening can be reduced to the point of smearing as well as full toning in the next step. If the printer also wants to find out the range of dampening, over dampening can be tested. The doctor rates in the dampening unit are increased in separate individual steps until a clear ghosting or a significant loss of density appears.

Suitable for nearly all types of presses

An ideally adjusted balance of ink and dampening solution shows only minimal deviations in tone values at various levels of dampening. Picture 1 and 2 show the printed sheet in the case of an ideally set printing press with over-inking and under-dampening. Picture 3 depicts the printed sheet from a printing machine with poorly set dampening unit.

The Fogra Dampening Control Test Forme is suitable for nearly all types printing presses and smooth printing stock. Furthermore it can be used to evaluate ink and dampening solution balance for all combinations of inks, dampening solution additives, blankets, plate types and roller materials.

How can print shops get the test form?

For more information about the test forme, costs for the service or an appointment for consultancy please contact Ulrich Schmitt.



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Arne Müller about **document security and forgery** **Let's talk with**

Arne Müller has worked for Fogra since 1988 and since March 2009 has been head of the Finishing/ID Card department. The hot topic of document security is one of the fields covered by this department and this has been an area that Arne Müller has been closely involved in. Fogra News talked to him about his work in the specially equipped Fogra laboratory.

What should our readers think of when they hear the term 'Document security'? Which products do you investigate in this field?

It covers all printed products that can be forged or tampered with. These

What precisely do you investigate with these products?

We gather practical evidence about whether a product is secure against forgery or being tampered with. A typical job will run along the following lines: 1 Familiarization with the product, 2 Developing forms of attack, 3 Carrying out attacks and 4, if appropriate, Production of [partially] forged specimens and evaluation.

Who are your customers? Manufacturers or users?

Both. We are approached by both the producers of particular security features and also by users such as mailing service providers.

We have also undertaken various jobs for ministries who are about to introduce new identity papers. In all cases, it is important that the customer can prove it holds all the rights to the product or has the approval of the owner of the rights. Otherwise we might possibly open ourselves up to accusations of forgery.

You have very special equipment in your laboratory. Has this got anything to do with reality?

Every product has to satisfy different security demands. Therefore, we have established and identified different levels for forgery/confidentiality trials. This allows the customer to decide what needs to be considered for its product. However, 'organized crime' cannot be allowed for, since, anything that can be done by one person can, with enough effort, be forged by another person.

That doesn't sound very encouraging ...

One must always remember that security is relative. However, one has already achieved a great deal if the security of a product is so high that a forgery can be detected. For example, if a special pigment can only be obtained from one manufacturer, then this already makes it very risky for the forger.

In which area are you currently experiencing the greatest demand?

Undoubtedly in the field of product authenticity. Many will immediately think of fashion and high priced goods. However in many countries in South East Asia, medicines are also extensively counterfeited and this poses a substantial potential risk. Special printing processes, stickers, embossing, inks and so on are used in an attempt to protect the originals.

Do you have a funny story for us to round things off?

Well, I was once sent a supposedly secure scratch card whose number was already clearly visible when lit from an angle...

Thank you for talking to us.



Arne Müller, analysing security documents in a special laboratory of Fogra's Print finishing/ID-cards department.

include such typical identity documents as identity cards, driving licences, VIP cards or season tickets as well as documents that have a value such as shares, entrance tickets, travel tickets that need to be protected against partial or complete forgeries. Then there are things like PIN letters, lottery cards, prepaid mobile cards whose contents it should not be possible to read without it being obvious that they have been tampered with. Secure envelopes and packaging that must display clear signs of having been opened form another category.

So you work in the laboratory as a 'forger'?

Yes, my job is to outwit the security features. For example, I can sometimes read an uncovered PIN on a Z-folded sheet through a 'normal' sealed envelope. With the aid of an extremely light sensitive camera and appropriate programming know-how, it can still be done even if the inside of the envelope is printed as a barrier and two further sheets are inserted in front of and behind the PIN.

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With simultaneous
German-English interpreting!

UV Printing User Forum 2010

Recently, the image of UV printing has taken quite a knock as a result of the levels of photoinitiators from UV inks recorded in foodstuffs, and the reports about this in various media aimed at the general public. When printing companies believe that it harms their image to show TV viewers that they are involved in UV printing, then there is an urgent need for corrective action. This is all the more annoying because technical solutions to reduce or eliminate the migration of photoinitiators have been available for years, and such ink series have not been used purely for reasons of cost.

The first day of the Forum will therefore discuss the options for avoiding further damage to the image of UV printing, whilst the talks on the second day will look at future trends in the development of radiation sources and their associated costs. Central to

this will be the question: "Are UV LEDs the radiation source of the future?"

The programme of talks, which will be put together and moderated by Dr



Wolfgang Rauh, is only one part of the Forum. The other will consist of face-to-face technical discussions. We expect that our 6th UV Printing User Forum will once again attract a large contingent of participants from press, ink, paper and other suppliers, with whom printers will be able to discuss their experi-

ences in detail. The social evening that closes the first day of the Forum will be an ideal opportunity to meet old acquaintances and to make new contacts.

Get the early bird!

Register until 31 August 2010 for the Fogra UV Printing User Forum on 16 and 17 November 2010 and you will get the early bird.

Detailed information of the programme and how to register can be found at www.fogra.org under Events > Symposia or will be provided by Inge Burian.

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Printers from Singapore visit Fogra

Organised by SPRING, Singapore, the president of the Print & Media Association and 14 print managers from Singapore visited Fogra. They enjoyed a tour through the facility and learned about Fogra's services.

Followed by a general introduction to Fogra as a non-profit organization, there were presentations explaining Fogra's structure, as well as an intro-

duction to the scope of research in the various departments. Our guests took a special interest in our current research projects in the area of Quality Control, digital control tools and test forms.

The visit was completed by a guided tour through Fogra with stops at the departments prepress and materials [presentation of paper and printability test equipment], quality management

[introduction to ctP acceptance test and printing machine commissioning test, Fogra dampening control test form] environment and chemistry [demonstration of equipment and certification of cleaning agents, fountain solutions, UV-inks] and print and press shop [presentation of CtP systems Kodak square spot, Lüscher UV and Heidelberg Thermal].

