

schattdecor

digital VISION

**MADE BY
SCHATTDECOR**

Schattdecor demonstrates the creative potential of digital printing

2009 has seen not only a greater focus on the use of digital printing in the production of surfaces for timber and engineered-wood substrates but also a distinct increase in the number of companies playing an active role in this new field on a technological or product-specific level. Various flooring manufacturers, such as Kaindl, Pergo or Frati, have already launched lines of digital-printed products, and leading trade fairs have been doing much to boost the topic of digital printing. This particularly applies to the Ligna show in Hannover, where a lot more leading surface specialists, such as Barberan, Bürkle, Kleiberit, Hymmen, Wemhöner Surface Technologies and Düspohl, exhibited digital printing equipment this year in both prototype and turnkey form. It was also at this event that Dieffenbacher announced collaboration with Gruppo Frati for production of laminate flooring at the unprecedented speed of 100 m/min on a pilot digital print unit in Italy.

New digitally-printed surfaces also caused a stir at the Interzum in Cologne, with Schattdecor in particular showcasing photo-realistic and creative fantasy designs produced in this way. Especially developed for the event by the Thansau design and creative team, the seven prototypes reflected the company's intense preoccupation with this forward-looking branch development and the creative approach it is taking in the process, whereby the following message came over loud and clear: what good is the best of digital production technology without the ability to utilise its creative potential? Or put another way: digital printing expertise needs decor design expertise.



Claudia Kuechen, head of Schattdecor's Design Department, is in charge of the company's 'digital visions'

digital VISION
SUMMER RAIN



“Green World”, a prototype digital-print decor, at Schattdecor’s Interzum booth

Schattdecor’s digital visions for a new dimension in design

In late May, *Surface* magazine got together with Schattdecor’s head designer Claudia Kuechen and corporate communications boss Bernd Reuss at the company’s headquarters in Thansau, Germany, to examine Schattdecor’s work in the digital surface design field and discuss fundamental questions regarding the new technology, both in its own right and in comparison to the more familiar rotogravure process.

Thansau has been occupying itself with creative digital printing for over two years. The project, titled “Digital Vision”, is concerned with digital printing as an autonomous process untrammelled by creative constraints, and not as a prepress stage of rotogravure printing. As such, it is lead-managed by the Design department and involves an interdisciplinary working group in which paper, colour, machinery and software specialists all play a role.

Schattdecor can naturally look back on extensive experience in the use of digital technology in the development and processing of decor designs, but this has always been in relation to rotogra-

vure decor printing and thus subject to limited colour choices. Technically speaking, once a motif or pattern has been decided on, both approaches are identical right up to composition, correction and improvement stages. It is then that they part. In rotogravure printing the pattern is electronically separated into three or four colour levels, processed further and prepared for engraving, resulting in lab proofs and three (or four) engraved printing cylinders. Achieving faultless results in this method requires a lot of know-how on the part of the system operator, and if corrections are required, the image files have to be modified and new cylinders engraved.

In digital printing, on the other hand, restrictions do not apply with regard to colours, and every decor design and development step takes place at the computer until the desired result has been achieved. For example, the design for “Pebbles”, a prototype digital-print stone decor developed for the Interzum, involved several photographs of various stones as well as details worked out at 150 percent magnification.



“Peacock Feather”, a digital-print study by Schattdecor that looks to the future of decor design

Rotogravure printing and digital printing: two differing approaches

Digital print decors do away with the need to think in terms of repeat lengths of 1300 mm and four-colour design (on a mixed colour system basis), as proved by “Peacock Feather”, a digital print study shown by Schattdecor at the Interzum with a repeat length of 1800 mm and colours in almost breathtaking variety. Claudia Kuechen relates that her designers enjoy the new sense of freedom and creativity that digital printing enables.

Indeed, imagination can be given free rein and no holds are barred with regard to colour choices. The method makes it possible to digitally scan, combine and collage all kinds of original materials, and colours can be changed at will. White, which is often problematic in rotogravure printing, can be used without restriction, and factors such as register accuracy and dimensional stability do not have to be taken into consideration. In other words, digital printing enables greater creativity and flexibility, but as Claudia Kuechen stresses, such creativity and flexibility has to be put to optimum use. However, she hastens to add, none of this should be seen as denigrating rotogravure printing; rather, the two approaches are simply different. As she explains, developing a decor for rotogravure printing involves a lot of initial input as well as time, money and responsibility, but the production method enables high outputs, with decors designed to meet mass tastes – the more can be sold on the market, the more successful a design has been. In digital decor printing, on the other hand, the prepress stages go a lot faster, reducing time and costs, and creativity is not subject to quantitative constraints but the print runs are not particularly long (as yet). Once digital printing technology is capable of achieving higher output volumes, the two approaches will become more comparable, with factors such as cost and quality determining when they are used. As Schattdecor’s head designer says, a combination of both methods is conceivable at present, involving digital printing for testing a new decor and using rotogravure printing to produce it once market acceptance has been determined. Schattdecor is not paying too much attention to this option, however, as it limits the possibilities of digital printing and hinders further development rather than fostering it. What is more, identical products are naturally not possible due to the matter of production volumes.

As Claudia Kuechen sums up, the decisive factor in developing decors remains the human aspect – i.e. creative potential. Schattdecor sees itself as ideally suited in this respect in the light of its past experience and successes, and it has the benefit of a global presence offering access to markets all over the world plus the advantage of owning a company that produces printing inks.



“Blowball” and “Koi”, two digital-print decor studies for table-top use



“Green World” and “Summer Rain” – another two of Schattdecor’s prototype digital-print decors



Creative abstraction of natural motifs

Schattdecor's goal in the digital field is to realise individualised designs. At the Interzum, its decor studies provided the trade audience with concrete examples of the depth and photographic fidelity that can be achieved with digital printing while underscoring its prowess in this new field.

As Bernd Reuss states, Schattdecor's technological resources for the development of digital printing decors are state of the art. This also concerns hardware and software solutions, which Schattdecor adapts to technical developments wherever meaningful. In practical terms, this applies to determining suitable printers, and a number of them are currently being put through their paces in Thansau, where Schattdecor is planning to install an industrial-scale digital printing unit over the mid term, all in an effort to find the perfect way of "getting ink onto paper". Foil will not be excluded from these efforts, but Schattdecor is only according it secondary priority in implementing digital printing technology.

The Thansau decor paper producer finds collaboration with other noted industry players "on a digital level" very important. A case in hand concerns Pfeleiderer AG, which in a press conference at the Interzum announced that Schattdecor had provided it data-sets of a decor for implementation in digital printing.

In Schattdecor's view, digital printing is just one aspect of its concept for the future. More important, however, is a question of central significance: which products do customers make and which technologies do they use in their manufacturing processes? The way things develop in this respect will continue to set the priorities in Thansau.

In Claudia Kuechen's opinion, decors designed for digital printing ought to involve motifs of their own and high creative aspirations. Since consumers seem to have a timeless fascination with (unspoiled) nature, she can mainly imagine abstract expressions of natural imagery as a main focus of Schattdecor's digital efforts.

In this respect, designs tailored to highly specific needs are conceivable, as in creating emotionally-based sales-promoting store environments or providing doctors' offices with the reassuring feel of natural scenery. Exchangeable furniture fronts created on a digital basis are a further option, as well as the sort of immersive themed interiors encountered in fan shops and similar.

Digitally-printed surface finishes are to help tap new target groups and application fields and as such can readily compete with other high-grade surface finishes, either alone or as a supplement to conventional rotogravure printed surfaces. In other words, the digital outlook is a promising one.





digital VISION

MADE BY
SCHATTDECOR

Schattdecor AG
Walter - Schatt - Allee 1 - 3
83101 Thansau
Germany
www.schattdecor.com