

# Cost-efficient production of higher quality in UV continuous stationery printing

Cost and energy efficiency are a constantly growing challenge for modern UV printing. Consequently, there is a need for simple measures that are capable of providing a quick and easy remedy. One of them is colour management for improved printing and drying properties.

Since installing its first UV drier in 1979, and with a total of 63 printing units in a wide variety of formats from 19.5" to 40", the Fränkische Druckpresse company in Crailsheim, Germany has become one of Europe's most modern mailing printers. Boasting a printing width of 960 mm and a format of 24" with UV drying, the 10-color press from Weyland is probably the largest UV continuous stationery press in Europe. The range of products offered by the competent and efficient partner for UV continuous stationery printing includes documents for quality management at an automotive corporation, special-purpose products for the data centres of financial institutions, envelopes for the product catalogues of mail-order companies, templates for the prepaid envelopes of postal service providers, or product information labels for sewing into outer garments. The most diverse demands are met in this respect, e.g. by coating, gluing, perforating or punching. The run lengths are typically between 10,000 and 10 million. The company employs roughly 90 people.

In their 25 years of experience with UV printing, the web offset printers



**Managing Director Detlef Horn (right) and printer Uwe Choinowski next to an Alprinta 74 from Müller Martini (10 printing units in 32" and 40" format with a printing width of 740 mm).**

have always adopted innovative approaches in order to be successful in this special segment. Recently, for example, by looking for a simple way of achieving quality advantages in the drying properties of the UV inks and obtaining more stable printing properties. And, given that the company uses roughly 70 tonnes of ink per year, they thought it would be even better if ink consumption could be reduced at the same time. In view of rising prices for energy and ink, potential ways of saving in UV printing are an important topic – but without sacrificing quality. Nevertheless, the market for UV printing is growing faster than the rest of the market for print products.

## COLOR MANAGEMENT

The company took the decision to use GMG InkOptimizer more than a year ago. Just a short test phase had already revealed significant advantages for the printers. GMG InkOptimizer is

very easy to operate for the user, automatically optimising the color composition of printing data using 4D DeviceLink profiles. Although the CMY component is replaced by black in the process, the color impression remains completely unchanged, because only the composition of the separation is altered. Ink reduction is applied in conjunction with all printing presses, for jobs on Type 1, 2 and 3 matt and glossy coated paper. Before this, GMG ColorServer is used to perform CMYK-to-CMYK or RGB-to-CMYK color space transformations, mostly on PDF data, and prepare the data in accordance with ISOcoated v2.

Since the printing company itself does not have a true prepress department, the various work steps must involve the least possible effort and complexity for the people in charge. After just brief instruction, the staff at Fränkische Druckpresse were in a position to handle all the necessary work

steps in a very short time. Since the data processing operation is highly automated, the users need no in-depth knowledge of color management.

**THE ADVANTAGES**

From both the technical and the commercial point of view, the optimised color composition of the printing data results in substantial advantages for Fränkische Druckpresse in UV printing. The particularly important thing for Technical Director Werner Schust is the more stable printing properties resulting from reduced fluctuations in the grey balance. In this respect, he sees the greatest benefit when printing catalogues for the fashion industry, where many black and grey tones typically have to be used. It now takes a lot less time to get the right colors on the presses, and the grey balance is far more stable over the entire catalogue run. The result is a visible improvement in the quality of print production. And, on the other hand, since chromatic ink reduction means that less ink is

*Fränkische Druck-  
presse is today one  
of Europe's most  
modern UV con-  
tinuous stationery  
printers.*



applied, the drying time is also significantly shorter. This cuts the energy demand for UV drying. But the challenges that can occur on the press at up to 370% TAC are also easier to get under control.

Detlef Horn, the company's Managing Director, makes particular mention of the ink savings achieved by GMG InkOptimizer as a positive side-effect. Depending on the job and the image motif, between 5 and 15 percent ink can be saved. As the company uses a massive 70 tonnes of ink per year, the

investment in the new software started to pay back after just two months.

**CONCLUSION**

Use of the GMG software improved the quality of the company's print products, especially in the case of motifs with difficult colors, reduced the consumption of chromatic inks and shortened the make-ready times. "I can only recommend people to use color management software, and especially InkOptimizer," emphasises Detlef Horn.