»ORIS CASE STUDY«

Achim von Armeln
Technical Director

"ALWAYS A STEP AHEAD!" IS THE PHILOSOPHY OF AVANTGARDE, ESSEN, ONE OF GERMANY'S LEADING WIDE FORMAT PRINTING COMPANY

After the early days in a basement room, Avantgarde became one of the largest large format digital printing companies in Germany. Thanks to ORIS Press Matcher Pro the same consistent color is now being maintained across all their systems together with substantial savings in ink costs.

The company was founded nine years ago by Wolfgang Böning, who originally started out as a decorator. Very early on, he realized the new creative possibilities for advertising design with the new large format printing systems then on offer. The real break-through for Avantgarde came with the installation of the first DURST RHO 600 UV flatbed printer, allowing printing directly on a wide range of rigid and flexible materials with white as a color or background and with inline varnishing to create higher color intensity or special gloss effects. Today, in addition to the Durst, two OCÉ Arizona 250 + 350 GT UV printers, a VUTEK QS 2000 UV printing system and a MIMAKI JV5 solvent printer form the complete printing line. For creating packaging dummies or special shapes a large format VHF CNC-rotary cutter and a ZÜND plotter are used. The building, which looks rather unspectacular from the outside, also houses a large material storage area. All standard materials like Forex rigid foam boards or Alu Dibond composite panels are kept in large supply to be able to produce time-critical 'rush jobs' without delay, a situation that happens quite often. Overnight and weekend production is nothing unusual for Avantgarde.

For quite some time now, word on the company's quality and capability has spread far beyond the greater Essen and Ruhr area despite the fact that they do not advertise and that their homepage does not even give information on their entire service offering. Among their customers are classical exhibition stand builders and retail store fitters, and of course design agencies, which regularly place orders for brands like Red Bull or Sony and Karstadt department stores.

In addition to these products, every now and then there are jobs which are a creative challenge for Wolfgang Böning's team. For an artist from Ruegen island, impressive large format reproductions of her artwork are being regularly produced as are steles made out of safety glass, weighing several tons and imprinted for an art museum. The variety of machines and the solid know-how of the employees enable complicated dummy packages or complex models to be completed. Just recently, a live-sized model of the Google street-view camera was built for an exhibition.

"Not for nothing I have named the company 'Avantgarde'." explains Böning, "We invest a lot, not only in the latest technology, but also in the training and know-how of our employees in order to always be a step ahead. Contrary to classic printing methods like offset, which now follow industry standards, digital wide format printing does not know any standards or any standard operating procedures. So we just went ahead and defined our own standards and internal processes over the years. Today we can guarantee a secure and effective production in spite of the variety and complexity of the business."

Head of the entire technical operation is Achim von Armeln, who, before he joined Avantgarde, worked for Durst for several years. It was he who introduced ORIS Press Matcher to the company: "At a prepress partner company I saw the CGS solution used there for proofing and digital printing," he adds. "Our customers increasingly expect us, as a wide format printing company, to adhere to the standards used in offset printing. More and more we get ISOcoated V2 proofs, which we also have to match in UV printing. It's not surprising, therefore, that our customers have much higher demands of brand identity than they had only a short while ago. Consistent color across entire brand communication is essential today. We installed a trial version of ORIS Press Matcher Pro and immediately noticed a significant increase in quality. However, this alone did not justify the investment since, in addition to the software, we needed to purchase a suitable spectrophotometer and a powerful computer. Our main objective was to create a more reliable and secure production process. Thanks to ORIS Press Matcher, we can now produce a defined quality at the touch of a button by reducing the costs of unnecessary test prints or material waste. Naturally, we are using a multitude of rigid and flexible substrates. Nevertheless we can now achieve the same color reproduction on almost all printer/substrate combinations. To a large extent we can keep our wide format printers within the tolerances meant for proofing systems. We now have created ORIS profiles for all standard materials and set-up workflows accordingly to automate the entire production. As almost all files are being centrally processed in ORIS Press Matcher, and some of the files are quite large, we have recently invested in a high-performance Quad-Core PC."

WE INSTALLED ORIS PRESS MATCHER AND IMMEDIATELY NOTICED A SIGNIFICANT INCREASE IN QUALITY

With some of the substrate profiles, von Armeln makes full use of the profiling tools in the software, for instance for backlit translucent materials where the color temperature of the light box is not known beforehand.

"Interestingly enough, we have noticed that we significantly save ink on all our printers when using ORIS Press Matcher compared to color management with ICC profiles alone. The software offers the ability to selectively influence the color composition to limit, for example, the total area ink coverage. Using the integrated UCR/GCR function, the chromatic colors are replaced with black. Overall we achieve, in addition to the ink saving, much smoother vignettes and a neutral gray axis. Another problem of the built-in printer rips is the unwanted transformation of the black channel.

THANKS TO ORIS PRESS MATCHER, WE CAN NOW PRODUCE
A DEFINED QUALITY AT THE TOUCH OF A BUTTON

WE CAN NOW ACHIEVE THE SAME COLOR REPRODUCTION ON ALMOST ALL PRINTER/SUBSTRATE COMBINATIONS

"Another feature of the ORIS software is the integrated pre-flighting and file normalization. Unfortunately, our printing systems use different rips; the Durst RHO 600 for instance is equipped with an American Cheetah- Rip. Instead of buying expensive updates, ORIS Press Matcher now gives us the possibility to generate a new PDF including the color transformation and compatible with older rips and still print, for example, transparencies correctly."

In the past it happened regularly that 100 % black, for example black text, was instantly transformed to a four-color black, or that a specific color mix from InDesign or Illustrator was not maintained. The problem lies in ICC profile technology which uses a profile connection space for the transformation. This LAB color space obviously does not contain a black channel. ORIS Press Matcher uses special Device Link profiles which convert directly from CMYK to CMYK. With these, a specific black composition can proportionally be mapped accurately to the target. One of our specialties is printing on glass plates or clear plastic and in the process it is important to achieve a high density in black areas so they are light tight.

Surprisingly, a 100 % pure black has a higher density than for instance 100 % black and yellow."

**AVANTGARDE AND MANY
MEDIA COMPANIES WORLDWIDE RELY ON ORIS PRODUCTS**

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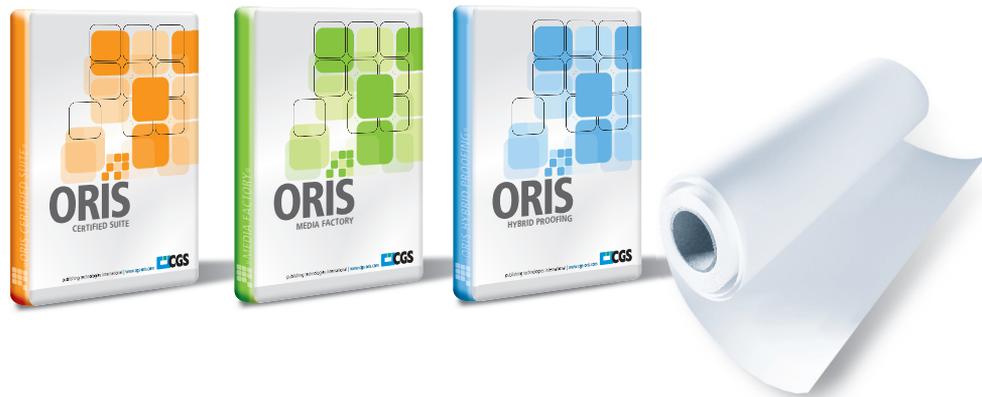
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