

Practical Experience Using Process Standard Offset for Large-Format Digital Printing

By Kurt K. Wolf

Although Fogra, the German printing-industry research institute, is in the process of developing an ISO standard for digital printing, Christinger Partner in Switzerland is not waiting. In November of 2006, Christinger got one of its large-format inkjet printers certified under "Process Standard Offset", and it has since been re-certified. The results have been nothing short of sensational.

Christinger Partner AG in Schlieren (near Zurich) is one of the largest Swiss companies offering large-format printing. It has about 60 employees and 10 inkjet devices. At the beginning of 2006, it was the first large-format digital printing company in the world to be certified as compliant with Process Standard Offset (based on ISO standard 12647-2). [Editor's note: In the United States, the G7 standard implements a subset of this ISO standard.] This made it possible, for the first time, to have a visual match between posters that were printed in parallel via offset and via inkjet.

Workflow Management

A long process led up to the certification. It involved installing a new production workflow and creating color profiles for all the printing systems on site at the time. Readers of Deutscher Drucker could follow this process in two articles, still available in full text on the author's Web site. Under the title "A Professional Solution for Workflow Management and Color" (2005), we reported that Christinger Partner had installed a workflow system, called "Proofyourself," in which all image data was stored in a color-neutral manner.

At the same time, each of the printing devices was profiled based on a printed test form, in a multi-pass process. As a result, Christinger was able to send the pre-ripped files to any of its large-format machines, and the colors of the printed results matched.

Because all of its large-format printers at the time (which included a Seiko 64s, a Roland Permasol, the Hewlett-Packard Designjet 5000 and 5500, a Scitex Turbojet and two Scitex XL-Jet 5 Pluses) needed profiles for several different substrates, more than 100 color profiles were created. It was a success: the printed result looked the same, regardless of which machine was used!

Owner Karlheinz Kaiser told us, "Putting in this system required a big investment, because each profile took about half a day of work, not to mention the down time on the machines. But it was worth it because now we can send any file to any machine and rely 100% on the proof. This has meant the first sheet off the press is always good, and we can also print jobs in parallel on multiple machines for quicker turnaround."



Karlheinz Kaiser

PSO Certification

Customers, ad agencies, and poster companies began to ask if Christinger could use their inkjet printers to print posters that were previously done in offset. They wanted results that would visually match offset printing from presses calibrated for Process Standard Offset (ISO standard 12647-2). Erwin Widmer from Ugra, the Swiss printing-industry research organization, accepted Kaiser's challenge and said he would be willing to test an inkjet system for conformance to PSO. Because of cost con-



The PSO certification is valid for two years (until 2011).

straints, they agreed to use only one machine (the Seiko 64s with inks from Marabu) and only one substrate.

Because of the careful color management at Christinger, it was not just the images coming off the Seiko 64s that matched PSO—the output of all the other devices was a visual match as well. “We got top-quality results right from the start,” Kaiser said, commenting on the success of the certification.

Because operators could be confi-

dent that the first sheet would meet the offset standard, they were able to do away with test prints, which resulted in substantial savings of time and material.

Big Increases in Efficiency

As a businessman, Kaiser was naturally interested in determining the ultimate results from the immense investment in standardization and certification, so he compared the results of 2005 with those of 2007. The number of jobs, print volume (in square meters), and sales grew by about 70%, but the number of employees remained the same!

As is well-known, PSO certification lasts only two years, so Kaiser decided to renew the certification. He was convinced that it would be increasingly necessary to conform to international standards. Once again, Ugra did the tests (again with the Seiko 64s), and it awarded the certificate on May 18, 2009.

Digital Posters

A close working relationship with Setaprint AG, a firm specializing in offset poster printing, has developed into a fruitful partnership over the last

four years. Christinger prints runs of up to 200 copies; longer runs go to their offset partner. Setaprint, in turn, gives Christinger runs of under 50 copies, as well as longer runs when the offset presses are busy with other work or the posters are needed in a hurry. Similarly, Christinger will also print longer runs if they can't be delivered soon enough via offset. Thus, factors other than run length determine the choice in the overlapping region of 50 to 200 copies.

In most countries, poster-based national campaigns require print runs in the thousands. Switzerland is a special case, however, because of its multiple languages. As an example, a Swiss campaign for Ikea used posters in four formats and three languages. Only 30 posters in each of the formats were needed in Italian, so these were printed digitally.

Campaigns for Small and Mid-Size Businesses

Switzerland, like everywhere else, is feeling the current economic crisis, and outdoor poster companies are finding it difficult to attract national advertisers. This caused one of them, APG AG, to launch a marketing campaign in which a fictional character named Ali tries to drum up business for his local shish kebob shop. The flyer pitches the low costs to small and medium-sized companies: “Starting at 33 Euros, plus printing costs of just 5 Euros per poster, you can emulate Ali's success with a 90 x 128 cm poster for 14 days.” The footnote associated with the asterisk states that Christinger Partner will print posters at this price for a minimum order of 25 posters. As an example, the flyer says that Ali could have 25 posters for 14 days in Chur, a city of 33,000 residents, for just 1,300 Euros, including printing. Of course, Christinger Partner can make back no more than their variable costs when they print 25 posters for 125 Euros, but it draws attention to the use of posters for local advertising – and these are jobs that certainly won't get printed via offset.

ISO Standard for Digital Printing?

Karlheinz Kaiser was surprised that other shops did not follow suit (as was the case in the offset world) after he got his certification three years ago. Only two other large-format shops have since gotten PSO

certification from Ugra: Druckerei Virtuz GmbH in Gestungshausen, Germany (near Coburg), certified in April 2007, and recently recertified; and the Australian company Look Print in Sydney.

Look Print was a member of the Giga Union, as was Christinger Partner, and that is how the Australian firm learned about Ugra certification, which it obtained on May 15, 2009. We asked Look Print's owner, David Leach, why he wanted his Australian printing operation certified to meet the PSO standard. He told us, as Australia's largest large-format printing company, working with international ad agencies, he had large multi-national customers that saw the value in global standards. With his PSO certification, he can prove he supports them.

But he has three internal reasons as well. Thanks to standardization, he has eliminated waste prints, he gets better utilization out of his machines, and he is able to be "first time right and right on time."

Kaiser is convinced that it is impossible to survive in today's world without in-house standards. An English trade magazine recently reported that four large-format printers in four different countries had joined

together to print international advertising. "What standard will they print to?" Kaiser asked. And how will output from those four match up with the rest of the world?

Kaiser has long maintained direct contact with suppliers in order to get the CMYK inks required to meet the PSO standard. In particular, this was necessary in the UV area. One of those suppliers, Hewlett-Packard, has announced it will introduce its first inks for PSO in 2010. Then, one of the problems of setting a digital printing standard will be simplified, though perhaps the journey will still be a long one. **TSR**



David Leach, Owner, Look Print



Ali Kebap Poster. This is how local advertisers were made aware of economical poster-based marketing.