FLAAR Reports

Nicholas Hellmuth

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Preview of FLAAR Report Series on

Wide Format Printers for CAD and GIS

Previews
Of FLAAR Reports on

Wide Format Printers for CAD and GIS

If you previously used Diazo, KipAmerica, Oce, Xerox laser LED printers or if you just want to learn about wide format inkjet printers for CAD or GIS, you have come to the right place.

These popular FLAAR Reports are intended for

- architects,
- engineers,
- contractors

- military
- surveillance, security
- police, fire departments

- electronics
- aerospace
- auto, trucking, and shipbuilding

- mapping
- mineral exploration

for CAD & GIS, as well as tips also on other applications such as signs & posters.

If you know what an Ozalid print is, if you can still remember the smell of ammonia, then you probably are precisely the kind of person who should read this report Series by Nicholas Hellmuth.

Every week we get letters from engineering and construction companies, contractors, electrical engineering, mechanical engineering, aerospace, oil exploration companies, landscape architects, interior designers, city planners, surveyors, and countless other companies who need to print line drawings.

Every imaginable kind of security agency has written us, from the CIA at one end to local security systems who also need to print building plans and countless other drawings.

In the past, most people took their work to a blueprint place. These companies are now reprographic printers. Today they tend to include wide format inkjet printers, but now every architect and engineer can have their own CAD printer in-house. The new HP model 100 is an example; as is the HP DesignJet 500 for color printing. Today (2004) Canon also offers wide format inkjet printers. Encad still exists but has not advanced much in technology since about 1997. The most sophisticated printhead technology available for GIS and CAD today is the over 7,000-nozzle Canon printhead. Our university now offers a full report on this Canon printer.

If your company needs prints for any of the following needs

- AEC,
- architectural drawings
- building graphics,
- CAD,
- Fabric design
- interior design,
- maps
- mechanical
- project plans,
- renderings,

Then today you can acquire your own wide format inkjet printer and easily accomplish the printing in-house.

Maps (GIS)

University geology and geography departments, mineral exploration companies, all branches of the military as well as federal intelligence agencies plus state and large metropolitan area polite departments, have asked Dr. Hellmuth for help in what type of wide format printers to purchase. Maps and prints of floor plans are essential in today's needs to prepare for emergencies.

- Aerial photographs
- CAD,
- GIS, geological, geographical information systems,
- maps,
- mineral and other natural resources exploration
- land use planning,
- real estate, housing development,
- land surveyors, land surveying,
- seismic charts

The question is, which printers should you consider? FLAAR has prepared the following entire series of publications on printers for CAD and GIS.

Comparative Review of various Printers for CAD, GIS, and computer generated drawings. At both universities FLAAR is associated with the architecture department on campus, and practically everyone in the Hellmuth family is an architect, so it is logical that Nicholas would report on which printers are good for printing drawings.

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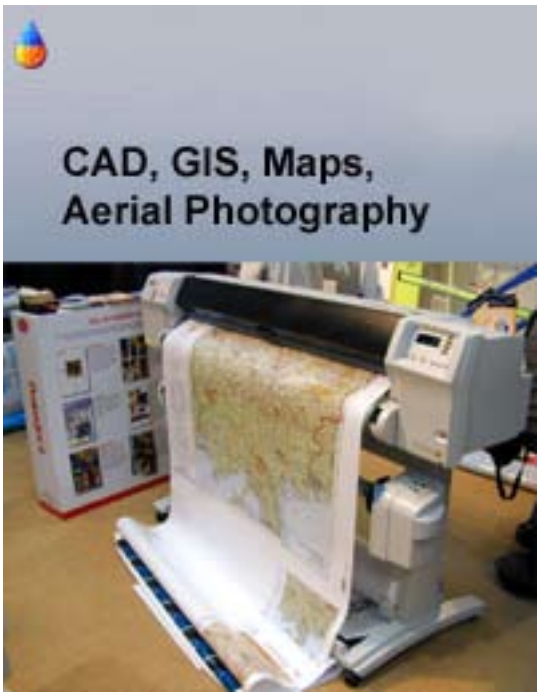

Comments on Wide Format Scanners, FLAAR Fast Facts. These are the large format sheet-fed scanners for maps, drawings, for CAD, GIS and other uses.

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Inkjet Printers for CAD & GIS: Pros and Cons compared with Laser – LED, Electrostatic, Diazo

New, January 2004.

Contents

Oil-Based Ink Wide Format Printers
Speed for CAD-GIS and short-term longevity for outdoor use without lamination.
Now that DGI is also offering an oil-based printer, now that the Seiko produces better quality, and now that that XES ColorgrafX X2 has reappeared, it is time to have a separate discussion on oil-based printers for CAD and GIS. Updated January 2004.

Contents

Evaluation & Review of the Epson Stylus Pro 7600 with UltraChrome Ink. August 2003.

This is one of the few totally independent reviews on an Epson that exists. If you wish to learn the truth about this printer, based on actual use printing everything from photographs and giclee, do yourself a favor and get a hold of this new report, by Stephanie Madeya (Bowling Green State University) and Nicholas Hellmuth (FLAAR at BGSU). Epson uses piezo printheads and before you buy a piezo printer you need to be absolutely positive you fully comprehend the difference between a piezo printer (Epson) and a thermal printer (Canon, ColorSpan, Encad, and HP).

Contents

Evaluation of Setup and Installation of the HP DesignJet 120nr December 2003.

The 120nr is a multi-purpose 6-color desktop 24" printer. You can use this for proofing, printing, and many other purposes. People have asked for help in deciding among all the other 24" printers, so we are testing them one after the other: Epson 7600, HP 120nr, and Canon W7250. This is what should expect from a university institute: full coverage of all alternatives so you can make an informed decision and thereby become a savvy buyer.

Contents

HP Designjet Scanner 4200.

Museums and libraries have lots of traditional maps that need to be digitized. The HP DesignJet 4200 scanner is an alternative that a university, museum, large library network or comparable institution ought to consider. The scanner was shipped first to Bowling Green State University. Here we had two architects and Anne Behrnes test it. When the architects and museum curators at our other university found out about the scanner, they jointly requested that they be able to use it, since seemingly here at Francisco Marroquin University there is immediate need for this class of scanner. So at the moment the HP 4200 is on an airplane to Guatemala. We are very grateful since many of the archaeologists who work here have lots of maps and architectural drawings that can be digitized.

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HP DesignJet 500ps: Evaluation for CAD and GIS.

We undertook a site visit case study of the HP 500ps in the architecture department of Francisco Marroquin University, which is in the adjacent building opposite FLAAR's facility.

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HP DesignJet 800ps: Evaluation for CAD and GIS

The architects on campus have the 500ps; FLAAR has the 800ps and we also have the HP DesignJet 1055cm. So you can look forward to frank discussion of the pros and cons of these printers for CAD, GIS, 3D renderings, and photographs.

This report is brand new. January 2004

Contents

Assembling a typical printer on day of arrival.

A report on what to expect when the printer arrives at your facility. We use the example of the HP DesignJet 5000, but it could be any printer. Suggests which brands and models of printer you can assemble and set up yourself, and which you definitely need an installer to come to your place and work with you the first day.

Contents

Evaluation of Setup and Installation of the HP Design-Jet 5500ps

New, Sept. 2003.

Comprehensive report by Tim Brown, BGSU+FLAAR on the recent arrival of the HP 5500ps.

Contents

Comprehensive Comparative Evaluation of the HP DesignJet 5500 in the FLAAR + BGSU testing facilities.

The HP 5500ps review is in two parts: Set up and Use. The Set up part is finished. The Use portion is still being worked on, since we are still using the printer. We will send you Part II as soon as it is finished.

New January 2004.

Canon W7250 Large Format Printer Setup Notes

The purpose of this exercise was to evaluate the ease at which a Cannon ImagePROGRAF W7250 could be assembled and set up for printing using the documentation which came with the printer.
The Canon ImagePROGRAF W7250 was to be setup by an unbiased individual using only the printer's user manual for assistance. Technology support was available through Canon, but the purpose of this test was to see how far a normal individual could get with the setup and installation on their own. Thus tech support was not to be contacted. The individual performing the initial setup had basic experience with large format printers; however, had no experience with assembling them.

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Evaluation of Installation of Canon imagePROGRAF W8200

The purpose of this exercise was to evaluate the ease at which an Canon ImagePROGRAF W8200 could be assembled and connected using the documentation that came with the printer.

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Evaluation of the Canon imagePROGRAF W7250 24" Six-Color Large Format Printer

We asked a graduate student, Tim Brown, to do the unpacking and initial setup. Since August is vacation period as well as semester break, he was available for just a short period. Thus for the actual subsequent usage evaluation, we asked Professor Chuck Spontelli to undertake that portion of the testing. We felt he was appropriate since Canon targets proofing as one of their goals. Presently Epson is a rising leader in proofing, rather surprising since thermal printheads of Canon, ColorSpan and HP would be a faster and potentially easier to use alternative.

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Summary

If your background is in blueprints, Diazo, KipAmerica, Xerox, or Oce printers for CAD or GIS, then you need the complete set in order for you and your colleagues to understand inkjet printer jargon and technology. The complete set will help you survive the deceitful advertising and slick hype that printer manufacturers and resellers use to push their products.

You can order the CAD & GIS series by itself, or together with the pertinent series that reveal the full range of hardware, software, and color management

Order Form

(also available from www.wide-format-printers.NET in the link to CAD-GIS)

CAD & GIS series $142, discount for FLAAR Friends $124

CAD & GIS plus RIP Series $284, discount for FLAAR Friends $150

CAD & GIS, plus RIP Series, and Color Management Series $426, discounted $250

CAD & GIS plus, RIP, Color Management, and Piezo-Thermal Survival Series $568, discounted $300. **This is the comprehensive set.**

If you also want the entire FLAAR Series on inkjet inks and materials (paper, media, etc. You can add the media titles for a flat $50 (list price if bought alone is $142). CAD & GIS plus, RIP, Color Management, Piezo-Thermal Survival Series, plus the whole inkjet ink and paper series $710, discounted $350. **This is the complete set.**

To be eligible for this and the other discounts listed here, you must be an architect, engineer, appropriate university department, or otherwise an in-plant or in-house facility for printing CAD and/or GIS. The CAD-GIS discount is not available to commercial printers or for any print-for-pay service providers to outside companies.

Discount is available only when you order everything in whatever collection you wish. If you buy the series one by one, then you pay regular price for each series.

Individual series, or Sets, can be ordered from www.wide-format-printers.NET

RIP **Evaluation Series**
Raster Image Processor software (the brains of your printer)

RIP, list of all the major RIP software. We have located over 80 RIPs for wide format inkjet printers. Fortunately we provide tips and help in figuring out which are good, which are obsolete, and the special RIPs which you ought to consider.

RIP+Help: this version is for intermediate level as well as for newcomers who may have no idea what a RIP is, or does, or why they need one.

Evaluation Standards for RIP software. *Itemizes the sort of features you should look for before you pay out $3,000 for a RIP.*

GLOSSARY of jargon and other confusing terms associated with RIPs for Wide Format Inkjet Printers.

Comparative Prices for Wide Format Inkjet Printer RIPs. Price watch chart for RIPs, both software RIPs and hardware RIPs. Also indicates different levels of RIPs, lite, full-strength but 1-printer, full-strength multi-printer, full and server based.

Wasatch SoftRIP 4.5 Evaluation Notes. If you are curious what it is actually like to set up, and use, Wasatch SoftRIP with a wide format printer, then this is a pertinent review for you and your company.

Scanvec-Amiable PhotoPRINT3 RIP Evaluation Notes. We ourselves were surprised at the results of this comparative review. But that's what you get when a totally independent institute does the evaluation.

PosterJET RIP, not to be confused with PosterSHOP RIP from Onyx. PosterJet is a German RIP, but has a distributor in the USA also. This report indicates why, when we could use any RIP made (over 70 brands of RIPs exist), why we use PosterJet.

Onyx PosterSHOP RIP. If you are a production shop then you have probably either heard of or are considering to purchase, Onyx PosterShop. This is one of the few independent reviews available of this software.

Before you pay anyone between $2500 and $3800 (or more for a multi-user or server version), you need to get ahold of these reports. And if your RIP costs less than $1500, you might want to learn from FLAAR what such a cheap RIP may be missing (fortunately there are two or three at reasonable cost which are full-strength; but you may not really want a lite RIP).

FLAAR is able to compare and contrast all the leading RIPs because we have nine different brands at our two university facilities. There is no trade magazine, and for sure no independent institute who has produced as much factual documentation on RIPs as is in this overall series. If you are about to upgrade, switch brands, or buy your first RIP, you will find the RIP Report Series a welcome relief.

You get the entire series, for a single price of $142, with instant discount if you are a favored FLAAR reader already. So your actual price is $120 for all reports in this RIP series if at any time in the past you have already filled out the Inquiry-Survey Form (if not you can still fill it out now to be eligible for the discount).

Report series on Color Management for Wide Format Inkjet Printing

This FLAAR Series introduces you to color management if you have a Canon, ColorSpan, Encad, Epson, HP, Mimaki, Mutoh, or Roland. A training course on color management averages about $2,000. Thus we feel our series of reports is fairly priced in comparison at $142 (discounted to $120 if you have already filled out an Inquiry Form; if not, you can fill out a form now to get your instant $22 discount). There is an even more substantial discount if you buy the Color Management Series as part of the Complete CAD-GIS Print-for-Pay Set.

Color Management for Wide Format Digital Imaging.
This report offers help on color management relative to scanning and large format inkjet printing. Nicholas Hellmuth has produced a totally comprehensive coverage of every color management and ICC color profile tool and software that he has heard of, seen at a trade show, or is available at his two university wide format inkjet evaluation labs.

Book Reviews of Publications on Color Management

Glossary of terms on Color Management for wide format printers, digital cameras, and scanners Remove the mystery of color management by learning the jargon. With Professor Hellmuth's assistance you too can understand the arcane terms.

Review of the GretagMacbeth EyeOne Pro, Brent Cavanaugh, lab manager, BGSU+FLAAR, Bowling Green State University. If you need to know about color management tools for your wide format printer workflow, here is a good start.

Color Management with Monaco Profiler, the pro edition. One report by Brent Cavanaugh, the other by BGSU professor Chuck Spontelli. Chuck's MS degree is from Rochester Institute of Technology. He teaches printing in the visual communications program, College of Technology, Bowling Green State University.

After Professor Hellmuth reviewed over 2,000 pages of books on color management and several thousand pages on the Internet, he realized that there was still no actual description of color management for people who had wide format inkjet printers. All the books were too technical, written by color scientists for other color scientists. All descriptions were written by specialists in offset printing, not inkjet printing. When on inkjet at all, the material was on proofing, and too technical for the normal user. We who operate large format printers don't have time to become color scientists. That's why we buy color management software and tools. We expect the tools to do all this for us. Well, almost. But to begin the long range process of helping owners/operators of large format printers, Stephanie Madeya was commissioned by FLAAR to produce a step by step description of color management specifically for wide format inkjet printers. This new report is now available: "***Step by Step Guide to Color Management***."

Report Series for Success & Survival

Become an aware buyer, become an informed consumer. Why let yourself be at the mercy of sly advertising hype? It is actually interesting to attend industry conferences where experienced managers themselves say that their own industry ads are deceitful. These are managers who are no longer working for any manufacturer so they can speak from their prior experience.

The purpose of slick ads is to delude the unwary buyer. Over the past several years we have jotted down notes on all the major misconceptions, assumptions, as well as some downright misleading advertising claims.

Glossary of Terms related to wide format inkjet printers. New for June 2003
This glossary is written to help newbies through intermediate users of inkjet printers learn the jargon of wide format inkjet printers. This glossary is based on the years of experience of Professor Hellmuth with his wide format inkjet printers at the two universities where he maintains test labs for digital imaging equipment.

Piezo-electric printheads vs thermal printheads: fact vs fiction
This key report deflates exaggerated claims and hype on both sides, discusses the advantages and notable disadvantages of both printhead designs. This report exposes lots of misinformation. You can make an informed decision on what printer to buy if you know the strengths, weaknesses, and differences between thermal and piezo printhead printers.

What to watch out for when the sales rep is moving in to close the sale… how to avoid misleading advertising and hype.
This pithy Survival Report cuts to the heart of the matter and exposes some of the basic bait and switch tactics and other favored ploys of over-eager sales people.

FLAAR Comprehensive List of All Large Format Printers, Makes and Models
This list is more complete than we have found in any trade magazine, plus this report provides tips on infamous weak points of pertinent printers. Before you buy your next printer, you might like to know all the options available from other brands. A different printer may be better for you?

Inspiration with Inkjet Printers: New Wide Format Printer Applications so you can sell into New Markets. Tips, Help, Suggestions, for all the uses that you can apply your wide format inkjet printer to accomplish

This is the original FLAAR version, substantially updated in September 2003. If you wish to learn how to earn money with your wide format printer, this is the report to get you started.

Is it advisable to buy a used Large Format Printer?
Every month we receive e-mails from people who already have, or are about to, buy a used printer at such a low price that it tempts them to skip common sense. The purpose of this e-mail is to do our best to bring up some aspects of reality that come along with the “good deal.”

FLAAR Evaluation Report series on Inkjet Media (paper and other materials for wide format printers)

The entire Series of FLAAR reports on media cost about the same as a single roll of 54" media. If you have already filled out an Inquiry-Survey form, there is an automatic discount, so you can obtain the entire Series of reports on wide format media for a fair price (because we are at a university, our reports are subsidized for you). The income is used to support the evaluations and educational programs at the two universities where FLAAR maintains research facilities.

Comprehensive list of all the different kinds of photo paper, fabric, silk, canvas, vinyl, backlit material, watercolor and artist's paper, even metal that you can easily print onto using a wide format inkjet printer. *Updated May 2003.*

Media for signs, posters, banners with some suggested sources of media and inks.

List of the more important Companies who Make or Sell Media for Large Format Printing *for Signs, CAD-GIS, Photo Printing, and Fine Art Giclee*.

Suggested Objective Standards for Evaluation of Inkjet Media for Wide Format Printers. Updated May 2003.

All the various Kinds of Inks and Colorants *used in Large Format Digital Printers plus Frequently Asked Questions about inkjet inks*

Glossary of Inkjet Media*: Substrates, Coated Inkjet Media, and all other Inkjet Printable Materials.* This is a comprehensive glossary of jargon and other confusing terms associated with wide format inkjet paper.

FAQs on Wide Format Inkjet Media*: A list of the most notorious horror stories of disasters with inkjet media.* Many of the people who related these stories lost their clients; and some companies went effectively bankrupt due to poor taste (or the wrong choice) in inkjet media. We can't save you from making your own wrong decision, but we can sure provide adequate warnings, advice, tips, and suggestions to at least your chances for survival are higher than people who don't read FLAAR reports.

We calculate the price of this series as follows: the entire series on Media will, in your business, probably either save you from buying at least one wrong roll of media. That alone pays for the entire series. or, may tell you of some company whose media is great for you. Again, your profit pays for the whole FLAAR series.

Order Form

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Consulting

If you have purchased any four FLAAR Series you can have 30 minutes telephone consulting with Dr Hellmuth in person, or lab manager Brent Cavanaugh, for a flat $300, or an entire hour for $400.

If you have purchased any five FLAAR Series you get 30 minutes telephone consulting for $200, or an entire hour for $300. Or, you can drop in and visit us in person for $300 per hour.

If you have purchased any six FLAAR Series you get 30 minutes telephone consulting for $100 or an entire hour for $200. Or, you can drop in and visit us in person for the same fee the first hour, $300 per hour thereafter.

If you wish Dr Hellmuth and/or Brent Cavanaugh to visit your facility, anywhere in the world, fax 419 372 8283 or e-mail FLAARtest@aol.com for price list for on-site consulting.

If you wish complete training in color management, this is available only on-site (your place or ours), and is best done over two days.

Telephone consulting can explain what tools and software you need, but we can't rectify your ICC profiles by telephone (but we sure can by on-site visit at your place).

Telephone consulting is primarily to answer your general questions as best we can and to assist in deciding what makes and models of hardware and software would be optimal for your specific situation. We can also answer your questions about scanners and digital cameras. Assuming you have already read the FLAAR Reports, we can usually resolve your situation in 30 minutes on the telephone as follow-up.

Obviously consulting fees are non-refundable.

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fax 419 372 8283. Please fax your complete list of questions. Indicate whether this is a new set-up first-time enterprise or list what equipment you already have or are about to buy if you are an established company. Our services are equally available for newbies as well as for Fortune 500 corporations.

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