

# Wide Format Printers, Inkjet Inks, Media & Substrates



at the largest Chinese sign expo  
APPPEXPO, Shanghai, July 2011

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The APPPEXPO in Shanghai is held every July. This Shanghai trade show is about twice to three times larger than any other printer trade show in the world (other than DRUPA). The printer workflow products occupy five large halls in the entire west wing and about the same number of halls in the east wing are occupied by traditional signage plus electronic signage such as LED and LCD. This year (2011) an entire additional hall was added at the north. (so total of about 13 halls).

This is a world-class event: I see colleagues from all over the world. I live in Guatemala, so noticed that the owner of the largest distributor in Guatemala was at this Shanghai expo (as he is also at FESPA, ISA, SGIA, etc).

I saw friends from India, Turkey, Greece, Iran, and around the world here (as every year at this Shanghai event).

There is a comparable printer expo extravaganza earlier in the year: in Dongguan and Guangzhou (two shows the same week, one hour from each other).

Due to the sheer size I tend to get to Shanghai early to be sure I have recuperated from jet-lag, and also to make sure that flight snafus don't cause an arrival delay. Since I have an exhibitor pass, I can get into the show early.

Halls W1 and W2, are the main halls for printers, inks, and media. Hall W4 has more inks and media, but also printers. Hall W5 last year was CO2 laser cutters and the noise and odor are too much to put up with so I rarely venture in once the machines are melting plastics everywhere. But for 2011 all the foul stench and unbearable noise of cutters were moved to the far far north hall, and W5 was printers, inks, and media. The East Halls are LED, LCD, and print shops, but almost no manufacturers of wide-format inkjet. But rarely is there time to get to that wing. If a company is not clever enough to get into the west halls, then they are not adept enough yet.

The amount of effort that each Chinese company puts into their booth structure is impressive. Plus, no booths collapsed at Shanghai in 2010 (one booth collapsed at Shanghai 2009 and one booth fell and crushed all the Mimaki printers at Reklama 2010 in Moscow last year).

FLAAR has banner stands within the Signs China booth (Sign-in-China) in Hall W3, near the entrance which is nearest to the outside main street. FLAAR also has banner stands inside the Sam\*Ink booth. There was also a FLAAR banner presence in the booth of Skyjet (because we have been at their factory twice and know the company and its printers). There are FLAAR banners at the Jetbest booth as well. We appreciate these companies providing space.

## Differences between this free exhibitor list and TRENDS version

There are three levels of FLAAR Reports on trade shows.

- The present free list can be downloaded on our web site. No cost.
- A \$324 report that has more information
- TRENDS series level.

The \$324 report costs less than a set of UV-cured inks, and includes.

- tabulations,
- comparisons,
- tips,
- information on pros and cons of key models.
- Revelations of which factory actually makes which printers (in other words, which “manufacturers” don’t actually make their own printers).

But the highest level is available if you purchase the TRENDS version, \$1200 for UV-cured printers; or \$2100 for the TRENDS in all printers:

- UV,
- solvent,
- latex,
- resin,
- textile,
- and water-based.
- For example, is latex ink of HP successful, or not. IF so, or if not, what are the reasons? What non-HP brands are coming out with competing latex inks?
- Is resin ink of Sepiastar successful, or not. What are the reasons?
- What other inks could potentially impact market share of latex and resin ink?
- How soon will more after-market latex ink be available?
- How soon will eco-solvent ink printers be phased out? What will replace them?
- How soon will UV-cured printer sales peak? (don’t worry, UV won’t disappear, but other inks are already taking away market share).
- What about ceramic (tile) printers? Which manufacturers have made millions behind the scenes selling top-dollar printers for ceramics?

FLAAR has all this information available in the TRENDS report. If you already have a Subscription then you will receive these. If you don’t have a Subscription, you can order an individual TRENDS (write [FrontDesk@FLAAR.org](mailto:FrontDesk@FLAAR.org), indicate how you wish to be invoiced; we send back transfer information so you can purchase the TRENDS for Shanghai 2011: \$1200 for UV-cured; \$2100 for all TRENDS for every kind of wide-format printer manufacturer in China that exhibits here, plus also for all the other manufacturers (Korea, Taiwan, North America, and Europe) who exhibited here.

Plus, if you have a Subscription (or if you order this individual TRENDS), then you can ask questions, directly, via Skype or Vonage phone, to obtain additional information directly from Nicholas.

## List of all the UV-cured printers exhibited at Shanghai in 2011

**Anderson DPC**, somewhat old-fashioned dedicated flatbed, COJET-2612, W1  
Anderson DPC, their normal combo belt model, AJet Plus

**Agfa** :Anapurna M2050, combo transport belt, W1

Agfa :Anapurna, with no brand name for the model; combo transport belt.

Agfa :Jeti 3348UV, roll to roll

Agfa :Jeti-1224 HDC FRT, dedicated flatbed. Last year the flatbed still had the original Gandinnovations flatbed colors. This year a newer generation was appropriately painted Agfa colors.

**AOJET**, W3 or W4

**Apollo**, combo. This is an ink company and the printer is most likely a rebranding or as a distributor. At D-PES they went under the name of Uranus.

Apollo, roll-to-roll; looks like Rodin.



*AGFA booth featuring :Jeti 3348 UV Galaxy.*

Blinding light from UV-curing lamps is still a significant issue for low-price UV printers. In one booth the unshielded light leak from the UV-curing lamps was excessive.

**Challenger**, two dedicated flatbeds with the Challenger name; two more elsewhere in booth (did not see brand name): so total of four same flatbeds. gantry across long axis, in booth of Fei Yeung Union, W5

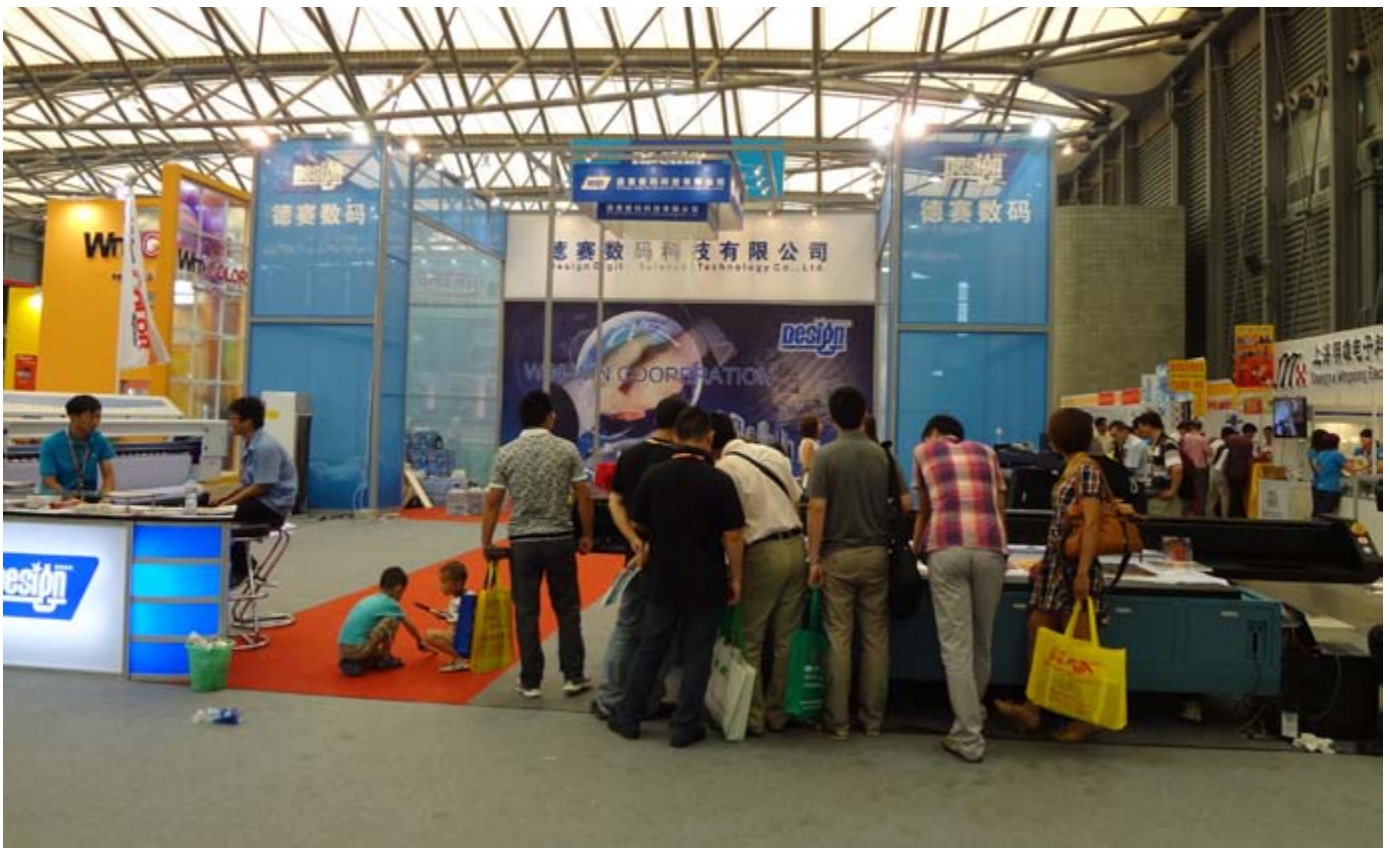
**Crystal**, dedicated flatbed, W4

**Design** DS-H/UV1600, combo transport belt, with LED from Sun Innovations  
Design DS-W/UV 3200 was not exhibited this year.  
Design DS-V/UV2500, dedicated flatbed printer

**Dilli Neo Titan UV-1604D**, W5  
**Dilli Neo Titan UV-2506W**  
**Dilli UV-2504DW**

**Docan** exhibited basically the same printer models as last year: W5  
Docan dedicated flatbed, carriage across length.  
Docan dedicated flatbed, carriage across narrow width  
Docan, 3.2 meter combo transport belt.

**Duoyuan Printing**, 5-meter wide dedicated roll-to-roll, W4  
Tough to tell whether this is a manufacturer, or distributor. The name sounds like a printshop, but printshops rarely exhibit at a printer, ink, media, and cutter expo such as APPPEXPO. The sales ladies said they had no interest whatsoever of selling this printer outside China.



*Design booth.*

**efi VUTEk** GS3200, W1

efi VUTEk GS5000r, was also exhibited last year

**efi Rastek** H652; previous year it was an older H650.

**Flora** 5008UV, roll-to-roll, W5

Flora PP 2512UV, dedicated flatbed

Flora PP 2512UV, second of these dedicated flatbeds (one is red)

Flora LJ3204KUV, roll-to-roll

Last year Flora exhibited three UV printers; this year four.

**Fujifilm** Advance, dedicated flatbed; rebranded Océ, W1

Fujifilm Advance HS, dedicated flatbed; rebranded Océ,

Their sample print should have been embarrassing; the woman's dark hair, and most of her head, was lost in dark shadow (so no detail whatsoever was visible). A billion-dollar Japanese company would be expected to do better digital imaging than this. On the back of this wall there was another photograph that was even worse. Yet elsewhere in the same Fujifilm booth there were glass or Plexiglas panels that were top quality images printed at gorgeous quality in white ink.



*Fujifilm booth*

**GCC StellarJET K72UV**, combo transport belt flatbed. W1  
Same printer as year after year after year. No new technology.

**Gandy Digital**, Pred8tor, flatbed, W1

**Handtop**, combo UV, W1

Handtop dedicated flatbed, across wide axis

I have never heard of this company before, Shenzhen Handtop Tech, Ltd. I assume they are a rebrander or distributor.

**HP Scitex XP2300** (former NUR Expedio), W1

HP Scitex FB700, but no nameplate was visible.

HP Scitex FB500 in booth of Esko Artwork, W1

HP Scitex FB7500, in Hall E6, out in an otherwise empty area at the far end of the hall.

HP Scitex FB6100 (former NUR Tempo Q) was exhibited a year ago, but is no longer manufactured.

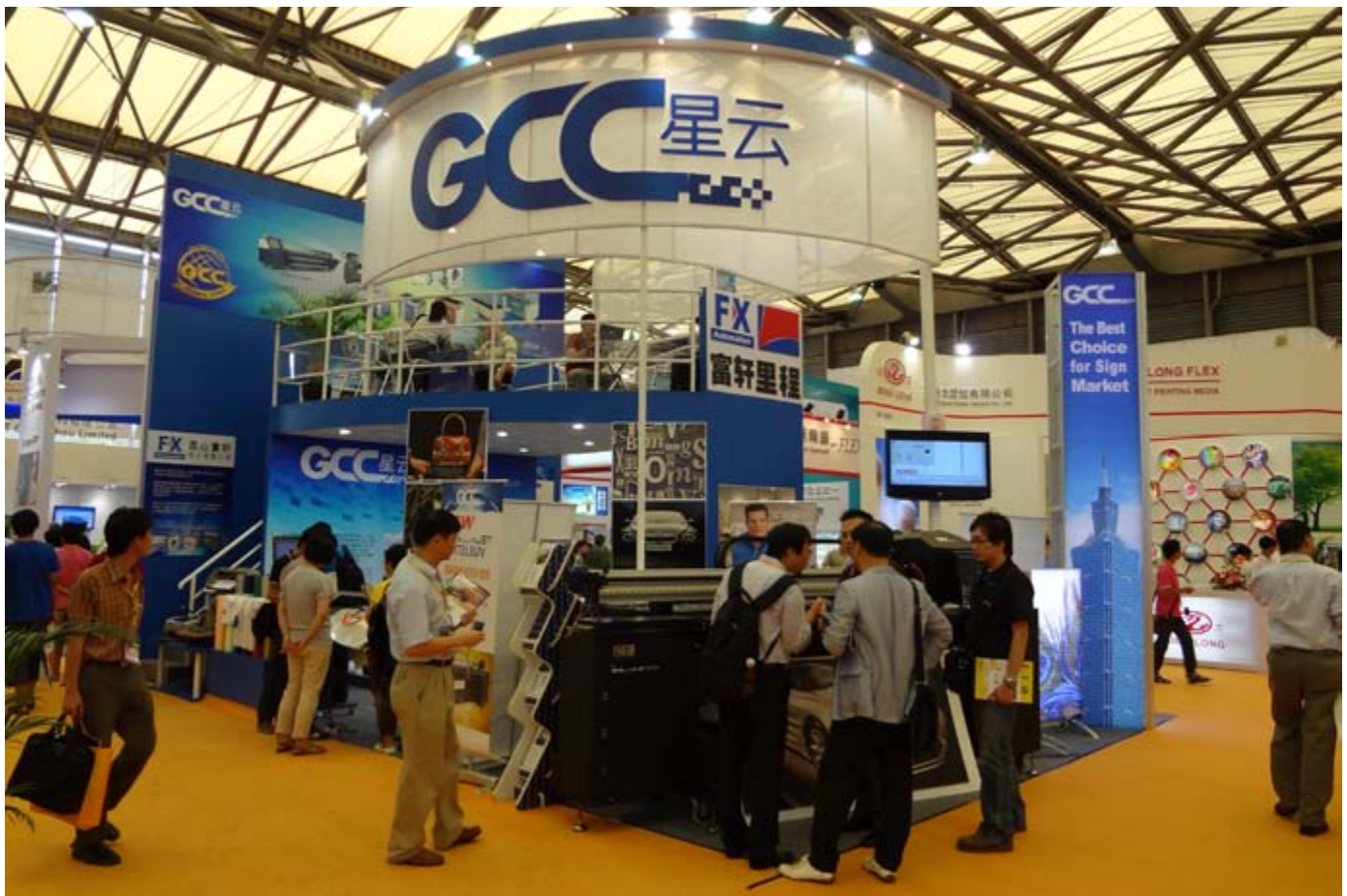
HP Scitex (former Scitex TurboJet) was present last year, but not this year.

**Human Digital XUV Jet**, W5

Human Digital XUV Jet,

Human Digital Combo-Jet. Despite the name this is a dedicated flatbed.

Human Digital MJet.



*GCC booth*

**Inwear**, 120X, a very small slide-through flatbed, W5.

Last year they exhibited a 220XK-LED-UV, roll-to-roll, but said that this year they did not have enough space.

**Icontec**, FB-2800, dedicated flatbed, prints across wide axis, W4

**Infiniti**, first time they exhibited in several years, W4

Two flatbeds, both printing across long axis.

**JHF Vista**, R5000, 5 meter roll-to-roll, KM printheads; W1

JHF Vista, F6000, KM printheads, dedicated flatbed, across narrow axis; W1

F3000, dedicated flatbed, W1

F3000R, wide axis, W1

JHF had a second booth in Hall W5, here they had

F3000, wide axis

JHF Vista E3000, flatbed, wide axis

JHF Vista T90UV, roll-to-roll

**Kincolor**, dedicated flatbed with carriage across narrow axis, W5

Kincolor, another dedicated flatbed but very small.



*JHF booth*

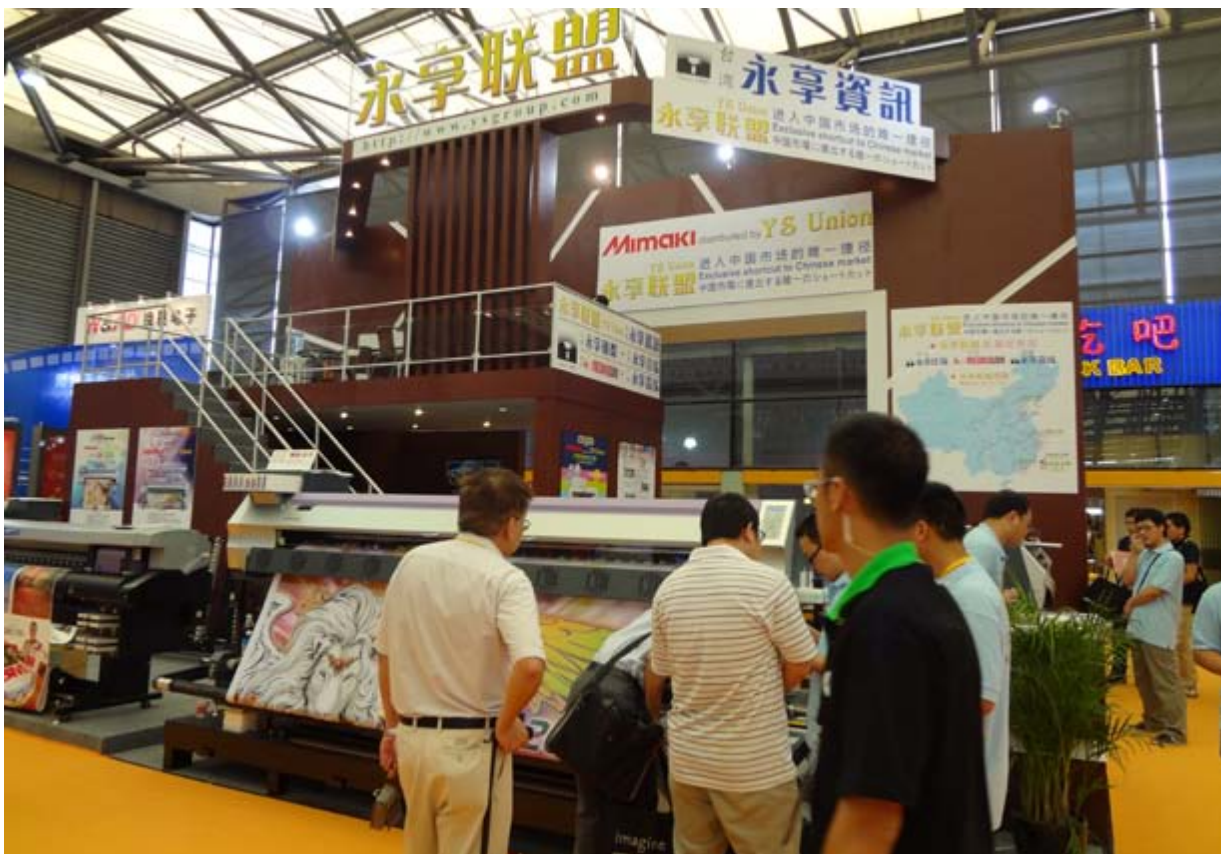
**Leopard**, is a brand associated with JFH Vista, W5.  
Leopard F1 UV, 3.2 roll-to-roll, in booth of JHF Vista,  
Leopard E3000 dedicated flatbed, prints across long axis.

**Liyu (Anhui Liyu)**, dedicated flatbed, prints across wide axis, W4  
Liyu, second flatbed, red, larger; prints across wide axis but the bed is almost square.

**LDP**, IUV 506r4, small pull-thru table, LED UV, Taiwan, W3  
LBP, GUV-R4, roll-to-roll  
The wall of their booth showed a bigger printer but no such larger UV-cured printer was actually exhibited. Actually it was tough to figure out which was the brand name and which was the model designation.

**Mimaki** had two booths, one with their distributor YS Union, in their usual position in W1; and another buried in another hall. That second booth had only textile printers. The more prominent booth had fewer UV printers than in previous years. There were no model UJF-3042 printers, and zero of the larger flatbed printers. It is rather clear that LED-cured flatbeds, especially at Japanese prices, simply can't compete with Chinese flatbed printers.  
Mimaki, UJV-160, hybrid (pinch roller on grit roller).

**MyJet**, mid-sized combo with transport belt flatbed (less than 3 meters), W4  
This is the most unusual exterior design of any combo printer that I have ever seen. It was missing from the MyJet booth at D-PES in Dongguan earlier this year, probably because the principal engineers abandoned MyJet and formed their own company, Sprinter.



Mimaki YS Union booth.

**Oce** small dedicated flatbed, Arizona 500GT. This year the Océ booth had a Canon flavor. In some countries the booth is still pure-Océ; in other trade shows the booth is 90% Canon. Here it was sort of Océ in Canon. W1

Océ Arizona 300GT in booth of AOJet, W4

**Rodin** P9320UV (why the new numbers), W5

Rodin X7250UV, Xaar Proton, was pictured on poster in the booth but was NOT yet on display.

**Roland**, old LEC-330 only in Roland booth,

Roland, LEJ-640, hybrid, pinch rollers on grit rollers.

**ShinyColor**, an old combo belt printer, W5

**Sky Air-Ship**, flatbed with carriage lengthwise and roll-to-roll, W4

Sky Air-Ship, flatbed with carriage across short axis

Sky Air-Ship, UV Flat-bed Printer (sic), long axis.

**SpecialColor**, Alpha, a rather basic roll-to-roll, W2

**Sprinter**, Polaris 15pl heads for CMYK; white ink had 35pl printhead. W5



*Océ AOJet booth.*

**Teckwin** flatbed; no model designation visible anywhere on the printer; so I had to ask: TS300.  
Teckwin 5 meter roll-to-roll, UV5000, instead of the TeckStorm TS300 that was in their booth last year.

**TianRun** flatbed printer, [www.XTR9999.com](http://www.XTR9999.com) I sure have never heard of this brand before.

**WER** had a booth but booth was not finished enough to know what printers were there.

**WitColor**, two dedicated flatbeds, W4

**Yishan** YS2407-GN, dedicated flatbed, prints across wide access, W5  
Yishan YS2400-GX, green, Konica printheads.

Last year Yishan also exhibited a roll-to-roll, but said there was not enough space this year.

**Zhongye** SK Series, two dedicated flatbeds, W4

One of the flatbeds looked repainted, suggesting it was not a true production model, but rather an aging prototype.



Zhongye booth.

## Flatbed printers other than with UV-cured inks

Most of these printers (that do not use UV-cured inks) are desktop size. Of these, most use a jerry-rigged Epson model perched atop a flatbed table. A few are full-sized flatbeds: such as that of Gunsjet. Some use relatively modest printer chassis but the flatbed portion is of reasonable size (Gateway).

We are not able to recommend any of these printers, since to evaluate them we need to visit the factory and then interview end-users to find out how they function out in the real world.

Of the Azon and of the Gateway, at least we know the company managers (but not yet how the printers function).

**Azon DTS**, in booth of Sprinter.

**Gateway** (a company related to Crystal), three medium-sized flatbed printers. W4

**Gunsjet**, full-sized eco-solvent flatbed, W5

**Kingt**, flatbed, W2

**Jetbest**, Roland VS-300 flatbed, Anyjet ink.

**Phaeton**, flatbed, prints across long axis, but not UV-cured, W5

Phaeton hybrid, with roll-up tables at each side (but no wheels on the tables), not UV-cured ink. W5

**PhotoJet** PH2515, fairly large flatbed, eco-solvent ink, W4

**ShenZhen** Orient LongKe Industry Co., Ltd., eco-solvent, W4

ShenZhen XinTianRun, two flatbed printers; one with desktop Epson Pro 4880C. Both using some form of solvent ink.

**Titan-Jet**, Jetwell 6080, W5



*Phaeton booth.*

## Flatbed XY Cutters

There are dozens of brands of cutters made in Asia. There is no realistic way to judge them, since we would need to visit the factories, and then visit customer sites (end-users), and ask how each brand functions out in the real world. So we list only the two brands where we have visited either the factory or at least the demo room, and end-users.

Kongsberg i-XL in EskoArtwork booth, W1

Zund in booth of Oce.

## Sepiax Resin Ink has a booth

Steward Partridge and his team organized a booth for Sepiax resin ink. It will be very interesting to see if a Chinese manufacturer is innovative enough to be the first to use resin ink. In the past decade Chinese manufacturers wait, and then copy with a cheaper model.

But it would be a breakthrough if a local manufacturer will dare to offer resin ink before manufacturers in the US or Europe, and in a machine that is reasonably priced instead of cheap. Cheap means low-bid components to keep down the purchase price (but then the components wear out quickly once the printer is put to use). I believe that to be successful in Western Europe and North America a better printer needs to be developed, from the ground up, specifically to handle Sepiax ink.

## Water-based printers at APPPEXPO

Surprisingly Canon has a booth here (W1). So does Epson, though I suspect Epson will be attempting to sell its eco-solvent printers rather than older water-based.

A few traditional water-based printers are also in the HP booth.

This year I saw more and more Chinese printers using Epson printheads. The potential for these printers, such as A-StarJet, is that they could use resin ink if the manufacturers would be innovative. But the tradition in China is to copy something that already exists. Since not many resin printers exist yet, they feel there is nothing to copy.

There are also many Encad clones using "left-over" Lexmark thermal printheads. I would assume these are using Lexmark printheads. There will be FLAAR publications on all Epson-printhead and all thermal printhead machines by later this week.

Seiko does not exhibit here.

## Media & Substrates at APPPEXPO

There are so many other media, substrates, and materials exhibitors that it is hard to keep track. Many brand names I have never heard of, not even in the list of 90 brand names from FESPA two weeks ago. There is a separate FLAAR Report on the inkjet media that was exhibited at FESPA and another separate report on the media exhibited at Shanghai.



## Solvent printers

Since solvent printers are a commodity, we do not evaluate many brands. But we do keep track of the eco-solvent, mild-solvent, full-solvent, and the so-called eco-solvent inks.

One comment I will include is that Scorpion exhibited two of their Korean-made solvent printers. I believe they were absent last year.

## Solvent printers conspicuous by their absence

I did not see Aeromatrix anywhere. They were present about three years ago, but not recently. In USA Aeromatrix also failed to appear at GoA+FESPA Americas 2011, but did reappear at one other expo in USA.

## Ink at APPPEXPO

There are more ink manufacturers than you can count. There are more large booths of ink manufacturers of brands and names you have never heard of before.

The only way we keep track is to visit the factory, visit the headquarters, and then inspect how the ink functions out in the real world. So I can evaluate Sam Ink because I know the owners (their entire families too). I have inspected their factories. And I have interviewed printshops around the world that use their inks.

Hongsam had a booth of healthy size. I also liked their exhibit of printed textiles.

Jetbest had a nice booth with interesting samples printed on rigid materials.

Sepiix continues to offer an ink that is a lot more eco-friendly than latex ink.

Why do we show more photos of some ink companies?

If we have visited an ink company, then we know more about them and have more photographs of the company to utilize in FLAAR Reports. So we know Sepiix because we visited their ink R&D test and demo room in Austria.

If we have been able to interview people who use the ink. So we know AT Inks and Sam Ink best because we have visited several different printshops that use their ink. For AT Inks we have inspected a successful company in Delhi that found AT Inks better than Toyo ink. Then we visited a company in Guatemala that preferred AT Inks over the other big-name brand.

With Sam Ink we visited three different printshops. Each printshop was content with Sam Ink in their mild-solvent HP-Seiko printer or in their HP water-based printer.

If you wish your ink to be inspected, evaluated, and reviewed in a FLAAR Report, we undertake this as a research and publication project. Contact [FrontDesk@FLAAR.org](mailto:FrontDesk@FLAAR.org) if your company would like to invest in this class of analysis of your company and your ink.

## Hall arrangement

The arrangement of the halls in 2011 was very different than in the last three or four years. First of all most of the CO2 and other cutting machines whose cutting of plastics produced nasty smell and excessive noise were (thankfully) moved to a remote north hall. A few lingered in hall W3, but hall W5 was no longer the Hall-from-Hell (with odor so bad that I never set foot in that hall again).

The downside of the new arrangement is that you had to walk through Hall W3 (mostly ink and media) to get to the printers in Halls W4 and W5. Halls W1 and W2 still had lots of printers as in all previous years.

The other factor which caused a reshuffling of which companies were in which halls was that for the first time in several years Infiniti was back. Infiniti, and thereby Crystal, had boycotted the expo the last year or so. This year they were both back, and each had huge booths. This is why the cutters got bounced out of

Hall W5 and (fortunately) moved into a far-away north hall.

Hall W1 was clearly the prestige hall. This is where many international firms had their booth: VUTEk, HP, Mimaki, Sam\*Ink, etc.

Hall W2 was also listed as an international hall but was very different than W1. W2 had lots of media and ink booths, but not many printers other than Mimaki textile booth, MiColor, Fortuna, and Century Star (disperse dye heat fixation units).

Hall W3 was primarily substrates and inks, but was labeled in the expo maps in a manner whereby I expected more cutters. Fortunately the cutters were (appropriately) exiled to the far north hall. Cutters make too much noise and excessive stench.

Hall W4 had a diverse mix of printers (Sky Air-Ship and others), media and inks; comparable to Hall W1. Sign-in-China was in Hall W4.

Hall W5 last year was the armpit of stink and noise of cutters. It was so unbearable I never set foot in that hall once I realized how terrible the noise and odor was. But in 2011 the W5 had a diverse range of printers, inks, and media.

Hall E1 was lighting (LED) and other comparable products.

Hall E2, LCD displays (plus one noisy band).

Hall E3, signage accessories.

Hall E4, signage and whatever.

Hall E5, converttech hall (had their own catalog).

Hall E6, packaging, but really was a lot of labels. Hall not completely filled.

Hall E7, printing and packaging.

Hall N (can't remember the number; it was so hot). laser cutters and CNC routers: best described as noise and fumes from incinerated plastic (being cut by CO2 laser cutters and CNC routers).

Our first day (which was the last set-up day, before the expo opened officially), was very busy.

## The Venue in Shanghai

Hall W1 was too warm last year; Halls W2, W3, and W4 were okay. At least the show organizers did not turn off the air conditioning at precisely 5pm as they did several years ago.

On the last set-up day (Tuesday), the air-conditioning was finally turned on during the early afternoon. In the morning no air-conditioning (because all the doors were open to allow trucks to bring in the printer crates). Fortunately the sky is so filled with normal pollution that the sun is barely visible. So it was not as roasting hot on Tuesday as it was on Friday or Saturday.

Taxis are more or less readily available but at the end of the show the line is about 30 minutes long to wait. At hotels taxis are available immediately if you are at one of the major hotels. There are several hotels within 12 minutes drive. Be careful you do not get stuck in downtown Shanghai: then you face a really long commute.

Hotel prices this year were much higher during 2010 than previous years because of the world's fair held this year, "Shanghai Expo."

There are not many hotels within walking distance. This makes Dongguan by far the most convenient trade show area of the country: several major hotels are across the street from the Dongguan expo center.

## Catalog, Maps, etc

The maps and guide posters around the entrances to the halls were more nicely done this year. Last year the print quality was awful.

## Chinese trade shows

The two really large signage printer, inkjet ink, and wide-format media trade shows have always been APPEXPO in Shanghai every July and Sign China every Spring in Guangzhou. The nice Beijing China Sign Expo is not as large because most Chinese factories are near Shanghai or near Guangzhou. Note that most of the trade shows have essentially the same name. What distinguishes them is their city, the time of the year, and their size.

But in late 2009 and early 2010, an association of printer manufacturers decided to move their booths out of Guangzhou to a rival city (Dongguan). So China Sign Expo was held from March 2 to 6, 2010. These were approximately the same days as the original show venue in Guangzhou.

China Jet-printing Equipment Industry Union and XuanHua Exhibition Co., Ltd. were the organizers of the Dongguan event. The traditional show in Guangzhou is organized by UBM Trust.

It was confusing, because most printer industry people automatically went to the traditional Guangzhou event. Most did not know about the Dongguan event until they got to Guangzhou and found that over 30 printer manufacturers were not in Guangzhou, but instead were one hour away.

There are FLAAR Reports on both the shows.

But I did make the journey to Guangzhou for one day. It was a huge show; even without 30 Chinese printer manufacturers, it had the non-Chinese manufacturers (HP, Mimaki, Mutoh, Roland) plus a few others. But the Guangzhou show had 95% of the ink and media manufacturers and distributors, plus LED, LCD, and everyone else.

Whether the media and substrates vendors move to Dongguan China Sign Expo 2011 is not yet known.

If indeed they keep two expos, it would be helpful to everyone if the Guangzhou event would start first, run three or four days, and then if the Dongguan show would start the last day of the Guangzhou show. This way thousands of people who need to attend Guangzhou can then also get to Dongguan.

If the two competing events are precisely the same days; both will suffer and no one will win. A two day overlap is okay; but overlapping three days is not good. People need a full two days at Guangzhou; and then a full three or four days at Dongguan. Or, three days at each.

## Booth Design

One booth had printers forming a wall the entire front and both entire sides. And the back of the booth was a solid wall. It took me a while to figure out how to get inside the booth to speak with anyone. There was a traditional sitting area with tables and chairs in the extensive inner area: but not really any way of reaching the open area.

One booth used the wide cores of media rolls to create a “chandelier” hanging down into the middle of their booth. Their walls were also made of adjacent cores of media rolls. It was a nice design.

## Concluding comments on differences between the TRENDS version and the free version.

We deliberately do not give statistics, since statistics for number-of-printers-sold and prognostications for sales growth are standing jokes among industry analysts. Those rosy prognostications are simply to make everyone feel good.

- In distinction, the FLAAR TRENDS explains why a company has gone bankrupt. We occasionally predict which company will go bottom up next (we hope they don't, but explain why they are heading for decreasing market share).
- So FLAAR TRENDS indicate which companies are losing market share and have lost their competitive edge (and we indicate why).
- TRENDS by Nicholas Hellmuth inform your company which companies are gaining market share.
- TRENDS by Hellmuth provide advance warning for what changes are about to hit your company.
- The FLAAR TRENDS provide information not available from any other resource (that we know of).
- For example, which printer manufacturers will abandon eco-solvent ink first?
- How soon will after-market HP latex ink be available?
- Who is developing additional varieties of resin inks?

But the main advantage of acquiring the TRENDS version is that you can take your questions directly to Nicholas and discuss the trends in-person via Skype or telephone.

First posted Monday, July 5, the day before the APPPEXPO opens. This is what FLAAR provides: timely and unique information on how the world of wide-format printing is evolving with new players in our industry: mostly from China.

Updated July 7th

The private TRENDS version is available if you Subscribe or specifically order the TRENDS version by asking for pricing via [FrontDesk@FLAAR.org](mailto:FrontDesk@FLAAR.org)