

TEXTILE PRINTERS, LATEX PRINTERS SOLVENT & WATER-BASED



UV-CURED PRINTERS ALL SIX DIFFERENT STRUCTURAL VARIETIES

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- All items on this list are hot links. -

INTRODUCTION

There were more brands of UV-cured printers at APPPEXPO 2015 than at any other expo in the world in the last fifteen years. At DRUPA there may be ten or at most 20 brands. Here in Shanghai there were over 90 brands last year (APPPEXPO 2014) and many more than 90 booths with UV-cured printers in 2015 (we estimate about 100 brands). So there are 90 good reasons to attend APPPEXPO in March 2016.

If you spent \$72,000 a year, to fly to all the expos in major countries around the world (airfare, hotel, meals, etc) you would not find as many brands at all these expos PUT TOGETHER as you find here in Shanghai this coming March.

So if you want to see a full range of UV-cured printers, Shanghai 2015 was clearly the place to come. In other words, to see this full range of next year's new models, APPPEXPO 2016 is a good decision.



UV-CURED PRINTERS COME IN MANY SIZES AND SHAPES

Dedicated flatbeds: the most common (two good examples in the booth of Skyjet).

Dedicated flatbeds with roll-to-roll across front (rare)

Dedicated flatbeds with roll-to-roll across front AND back (Swissqprint). Agfa also has their improvement on the original Gandinnovations structure, but not all the flatbeds include this option.

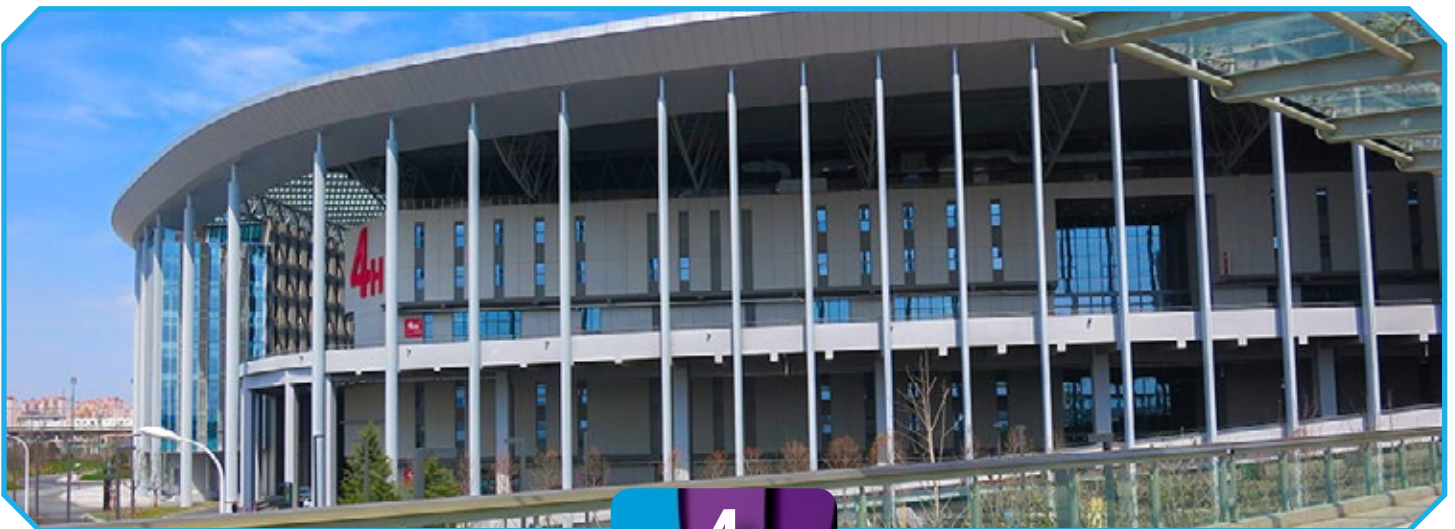
Combination roll-to-roll and flatbed: with conveyor belt (especially in efi VUTEk and dilli booth).

Dedicated roll to roll (many brands, including efi VUTEk, dilli, and a rare double-sided roll-to-roll in the booth of Skyjet. Roll-to-roll UV-cured printers come in several classes: grand format (3.2m and 5m) and entry level (1.6 and 1.8m). Dozens of Chinese brands make the entry level kind of UV-cured printer. Most of these use equally low-bid Epson printheads.

Faux flatbed: pinch rollers over grit rollers trying to pretend it can handle thick or rigid material. Not many of these are made any more since not even Neolt was able to get them to function as advertised. HP dropped this fake flatbed that had been what ColorSpan developed as an adaptation of ColorSpan solvent printers. Roland is one of the few companies today trying to pretend these are flatbed capable.

For industrial sized flatbed printers there are also several varieties, such as those of Inca Digital, where the bed shoots in and out very fast). On most entry level and mid-range flatbeds the bed is stationary and it is the gantry which moves (slowly).

All the printer classes listed above are large-format or grand format. But there are also **desktop sized flatbed printers**. Most of these are made in China; a few are made in Korea. One good brand is made in Singapore. You can find almost all these brands at APPPEXPO.



ALSO DESKTOP-SIZED UV-CURED PRINTERS

In past years we kept lists of all UV-cured printers. Now there are so many desktop sizes that we have separate lists for desktop and mid-sized (next paragraph). Desktop vary in size from A4 to A3 size.

Sometimes these are retrofitted Epson desktop printers (jacked up to sit on a flatbed). But increasingly the factories make the entire structure themselves, though the printheads are often still from an Epson desktop. But gradually the better brands are evolving to more industrial-strength printheads such as Konica Minolta or Ricoh.

ALSO MID-SIZED DESKTOP UV-CURED PRINTERS

There is a definite trend in mid-sized UV-cured printers. There is no formal definition of their size, but over 80 cm, and maximum dimension less than 2m (since at 2 m they are already a normal signage-sized flattop). Some sit on your desk; others come with their own stand.

Mid-sized models of several sizes can be easily seen in the Mimaki booth. Now there are similar sizes and shapes from China, Korea, Singapore and the USA. So if you are looking for a mid-sized UV-cured printer, there are lots of options at APPPEXPO 2016.



UV CURING CHEMISTRY

There are several ways to cure UV ink:

- Mercury arc lamps
- LED lamps
- Long tube, comparable to size of a fluorescent tube used in an office (this is what cures SUV ink, solvent UV ink)

LED can also be used for pinning the ink; this means a light cure, just enough to keep the ink from moving; then a mercury arc lamp does the final cure.

Most grand format printers use mercury arc curing. Efi VUTEk is a leader in evolving towards using LED at this high-end level.

Most entry-level UV-cured printers, especially those using Epson DX5 and DX7 printheads, use low-level LED lamps. Many desktop sized UV-cured printers use only a single lamp. In the comparative tabulations of the separate TRENDS level reports we show all the brands and models.

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APPEXPO 2016

March 9-12, 2016

National Exhibition and Convention Center (NECC), Shanghai

www.appexpo.com

TOTAL COVERAGE, IN DEPTH, TRENDS LEVEL



Here are the five TRENDS level FLAAR Reports on the over 90 booths of UV-cured printers. These special reports list all of the several hundred models.

If you attended APPPEXPO this list can help you keep track (though since we had a team of six, it is unlikely you found all the brands and models, since some were in remote parts of Hall 6).

If you missed APPPEXPO 2015, these FLAAR Reports discussions of the impressive diversity of UV-cured printers is essential.

When you have these FLAAR Reports, you have knowledge that is useful for a distributor, manufacturer, or large print shop that should keep track of what competition is available. You can ask to be invoiced to receive any of these series by writing FLAAR "at" FLAAR.org.

It is always nice to see a company developing interesting new techniques to improve printers. Thus we enjoyed seeing the SKYJET UV double side printer SDM3300i. So we felt it would be good to do an evaluation of this printer. But to do an evaluation, we need the User Manual so we can learn the operation of the printer. The master distributor, ironically a Japanese company, said the User Manual would not be available, so we had no way to continue the evaluation, especially since this distributor has no wide-format inkjet printer booth whatsoever at any expo around the world that we attended in the last several years.

Despite the issue with the master distributor, because this is an innovative double-sided concept, we feature this printer on the front cover. SkyAir-Ship itself is a well known and respected company. I have visited their factory and am thus familiar with their capability, with their owner and with their top managers.

To do an evaluation of a printer, a factory visit is an important first step.

SOLVENT PRINTERS

TO INSPECT AT APPPEXPO 2016

- Eco-Solvent
- Mild- or Lite-solvent (same ink, just different way to say it)
- Full Solvent

Several printer manufacturers have attempted to create other inks with bizarre names to convince the end-user that these other inks can do the same as solvent but with less VOCs. None, I repeat, none of these alternative inks lasted more than a year or so on the marketplace (because each new ink had one or more quirks so that even its good features were not enough to allow this new ink to become popular).

As one person said, "the era of (eco) solvent printers is ending." But... there were 70 brands of solvent printers (plus well over 90 booths and circa 100 brands of UV-cured printers). These statistics are why we offer TRENDS level FLAAR Reports. These list every brand, every model:

One series of FLAAR Reports on all textile printers at APPPEXPO

one series of FLAAR Reports on all solvent printers at APPPEXPO

One series of FLAAR Reports on all UV-cured printers at APPPEXPO

Solvent printer era continues full-scale in many parts of the world. Eco-solvent inks are now in their fifth generation improvement (if you have an eco-solvent ink from a respected and capable ink company). So both for distributors and print shop owners, to learn about the newest solvent printers is essential.



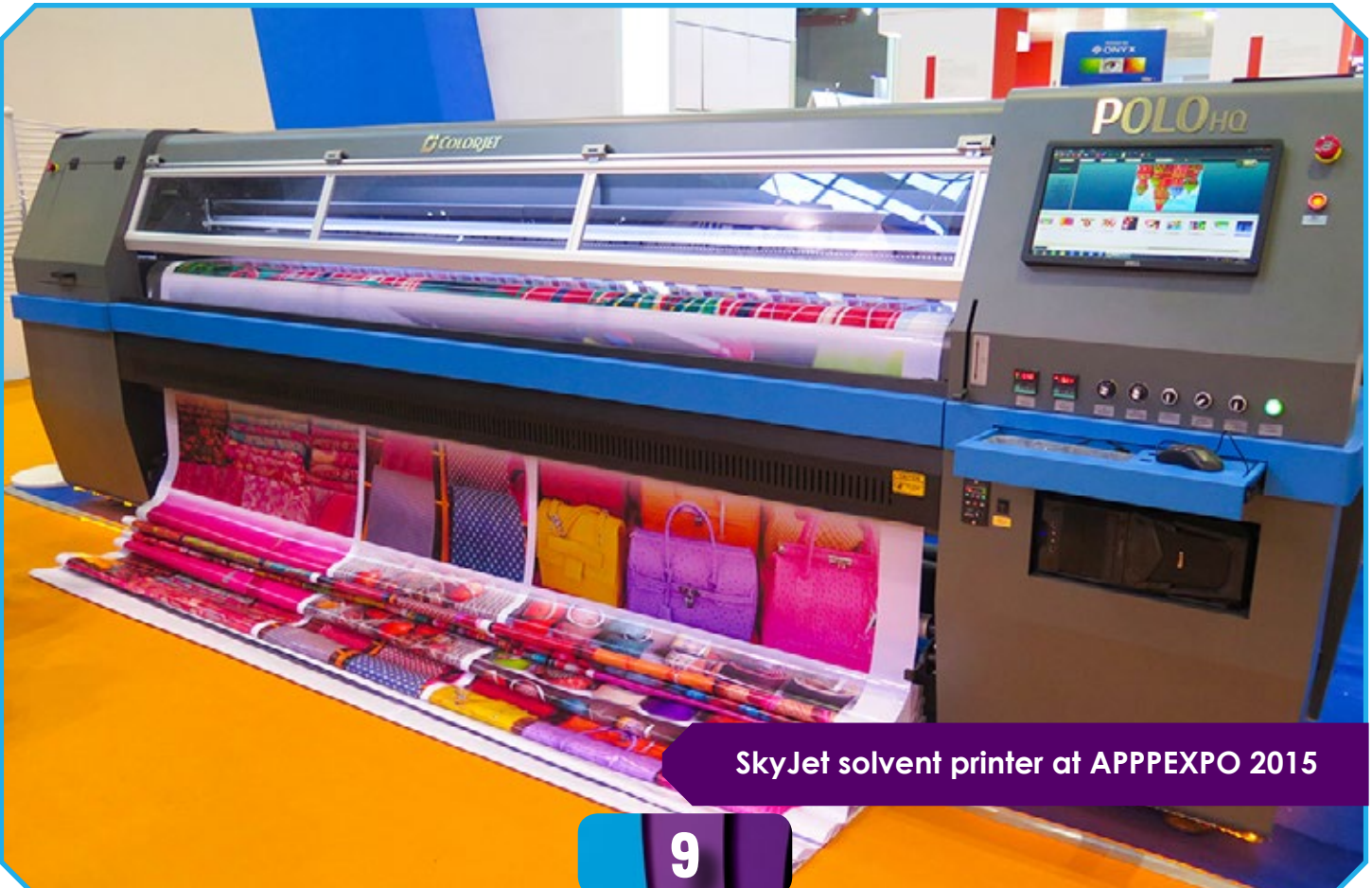
Infiniti Challenger solvent printer



Flora solvent printer



ColorJet solvent printer at APPEXPO 2015



SkyJet solvent printer at APPEXPO 2015

PLUS, IT IS REALLY HELPFUL TO LEARN THE PROS AND CONS OF EACH PRINTHEAD

Every brand of printhead has a slightly different firing technology. Some printheads are outstanding for in-line one-pass ceramic printers (Xaar, for example). But Xaar printhead technology is not for water-based textile inks, so for textile inks a Konica Minolta printhead can be used. Or Ricoh or Fujifilm Dimatix Spectra.

Plus since Epson tried to hinder the availability of DX4, DX5, DX6, and DX7 printheads about two years ago, the gray market price of Epson DX printheads has doubled or quadrupled (but the heads are identical to the entry-level cheap DX heads of five years ago). So there is a really much higher cost, but no additional features. As a result, several printer manufacturers are switching to Panasonic heads or to a low-end Ricoh head. We explain this in our TRENDS level FLAAR Reports. But if you attend APPPEXPO 2016 you can inspect these alternative heads yourself.

Plus you can see all the other Ricoh, Konica Minolta, Fujifilm Dimatix Spectra, Xaar and Kyocera printheads for all flavors of solvent printers.



Epson printheads exhibited at APPPEXPO 2015

LATEX PRINTERS

Rather obviously HP holds 90% of the latex printer market around the world. However if you enjoy seeing innovative alternatives there were three totally unexpected alternatives at APPPEXPO 2015.

So at APPPEXPO 2016, you may be able to see PRINT and CUT versions of latex printers!



This HP latex print-and-cut system is not made by HP; the printer is, but not the cutting system. The only place in the world we have seen this is APPPEXPO in Shanghai.

T-SHIRT PRINTERS WHICH YOU CAN CONSIDER AT APPPEXPO 2016

Nine brands and twelve models of T-shirt printers allow you to see a good sample of entry-level price conscious T-shirt printers at APPPEXPO 2015. So you can hope to see comparable at APPPEXPO 2016.



AnaJet T-shirt printer at Mutoh booth in APPPEXPO 2015

What is also noteworthy about APPPEXPO is that you can simultaneously see Japanese, Korean, Taiwan, European, and USA brands, in addition to more Chinese brands than any other expo in the world. So at one single location (Shanghai, in March 2016) you get access to everything you need.



ZhongYe T-shirt printer at APPEXPO 2015



Azon T-shirt printer at APPEXPO 2015

TEXTILE PRINTERS TO LOOK FORWARD TO AT APPPEXPO 2016

48 brands and 82 models of textile printers make the textile portion of APPPEXPO 2015 almost as large as the entire textile printer brand list for dedicated textile expos. In other words, at APPPEXPO you can see DOZENS of brands of textile printers, plus UV-cured, solvent, latex and water-based.



ColorJet textile printer at APPPEXPO 2015



ADDTOP textile printer at APPPEXPO 2015



ADDTOP textile printer at APPPEXPO 2015

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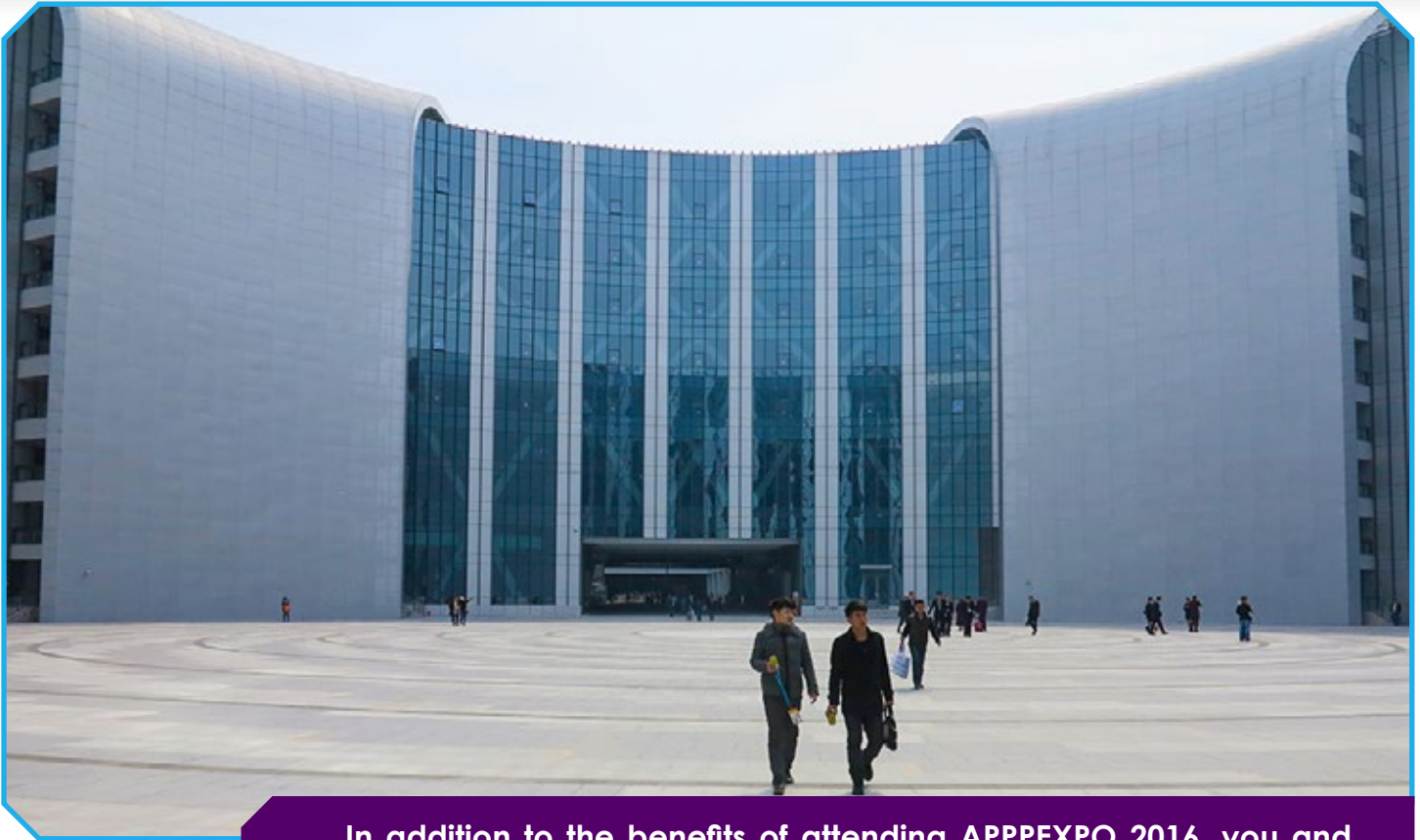
www.apppexpo.com



Five of us from FLAAR will be at APPPEXPO 2016

We would not send this large a team unless there was lots of interesting inks, media, substrates, cutters, laminators and printers to see.

Plus everyone in our FLAAR Reports office wants the opportunity to experience China in general and Shanghai in particular.



In addition to the benefits of attending APPEXPO 2016, you and your family, or you and your colleagues, can experience Shanghai.



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