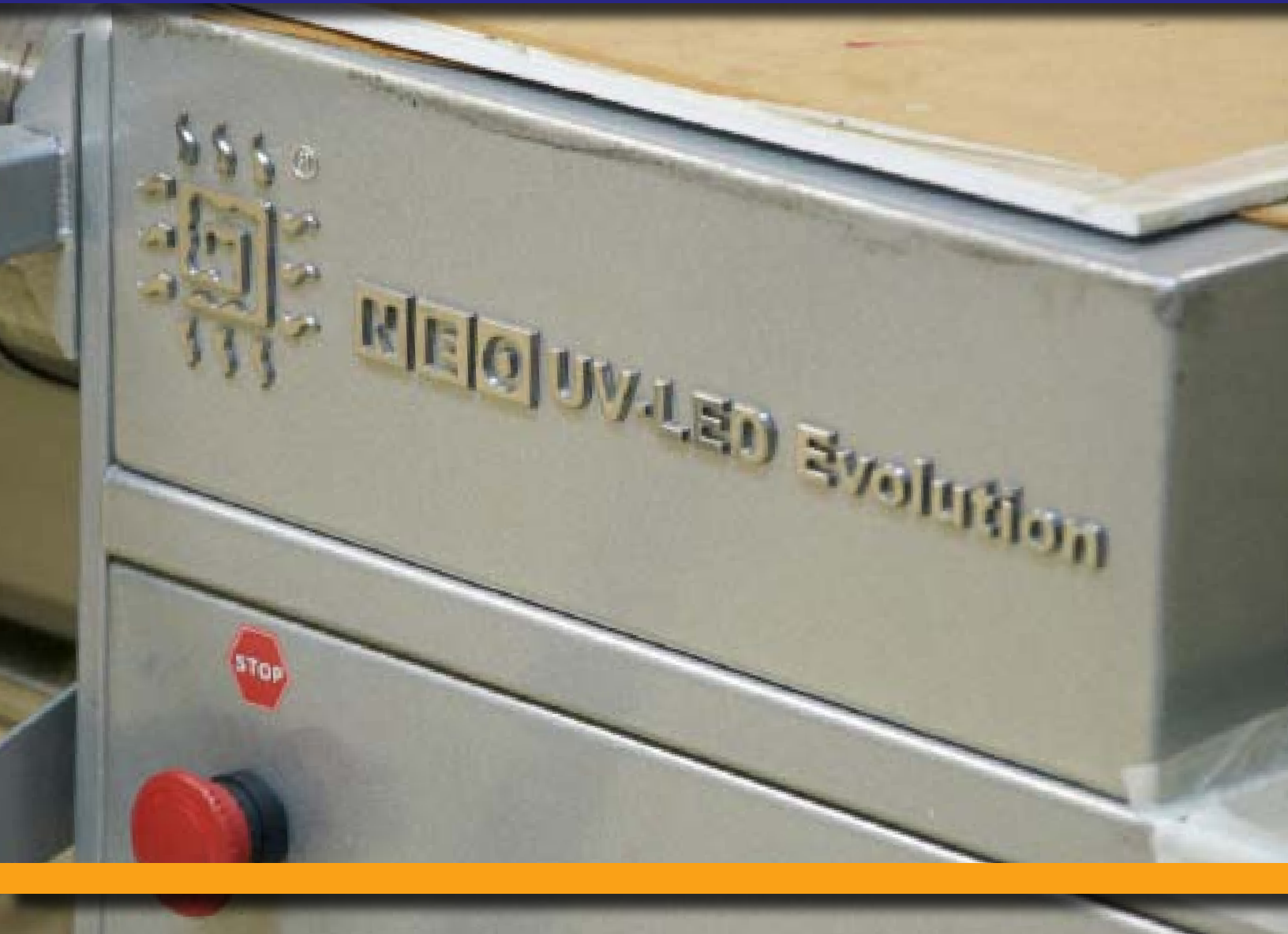


Evaluation of a
combo-style flatbed
(moving transport belt flatbed)
NEO UV-LED Evolution
Current model (up through 2012)





There are now several models of the NEO UV-LED Evolution

- NEO UV-LED Evolution TurboSpeed (new for drupa 2012)
- NEO UV-LED Evolution PRO (relatively new)
- NEO UV-LED Evolution Light (the 2012 version of the Compact)

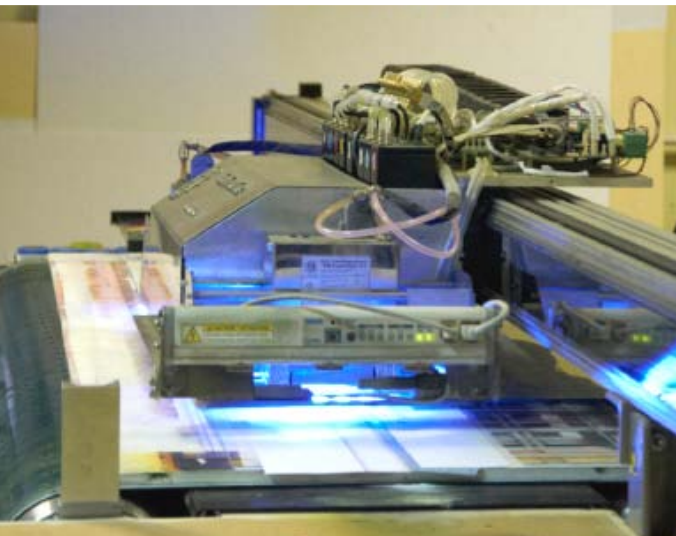
And there is the NEO UV-LED GlassTech, a dedicated flatbed

But the printer which is most often exhibited around the world during 2010, 2011, and 2012 has been what I would tend to call "the original" NEO UV-LED Evolution, 2.5 meter width. So this introductory report will cover this model, since this was the printer in the factory during our pre-drupa 2012 visit. Plus this is the printer (this or the Compact) which I see most often at printer expos in recent years.

As the TurboSpeed and PRO move into production and gradually replace the original model, we will do a separate evaluation on the TurboSpeed and PRO.

We are not presently evaluating the "light" or "compact" version. We are starting with the full size (2.5 meters).

Once we see the new TurboSpeed model (here at drupa 2012) we will begin a long-range evaluation of this new model. But since the original model is what was being manufactured during our visit, we focus on the original model now.



This printer is entirely engineered in Russia

Novosibirsk is a major industrial center of Russia. This is because heavy industry was moved to this deliberately remote area so the factories would be outside the reach of Allied bombers of that early era.

Plus there are many universities here in Novosibirsk, specifically technical universities.

I spent two days interviewing the head technical person, Andrey Dyachenko, plus I speak with him at trade shows around the world, plus I had meetings with him during my week-long visit in 2008.



This printer is manufactured and assembled in Europe

“A picture is worth a thousand words.” So these photos of ours should document that the printer is made in Europe.

We do not show close-ups from the component assembly rooms on the adjacent second floor because rather obviously we are under NDA (NonDisclosure Agreement about interior components). But we were inside and/or looked in the door where rows of assembly people were building components, the curing units and the electronics boards.

We also visited the other side of the factory with all the mechanical milling equipment for the roll-up tables and the structure which holds the printhead carriage. This is made from metal here in their own factory.



This printer is based on five years experience

Sun Innovations was a distributor for wide-format printers for several years when they gradually began to develop, and perfect, LED-curing. I visited the ink R&D labs and the LED R&D labs and assembly facilities in Russia circa 2008. They had already made their LED-curable ink, and had already developed their early-generation LED curing devices.



In 2012 I returned to make a follow-up inspection. Everything was different. No more Chinese printers coming in. Now 90% of the electronics is designed, developed, and put together in the factory of Sun Innovations. The LED is all their own technology (the control boards and control firmware). Obviously LED components tend to come from Japan.



A complete evaluation should include a printshop visit

An intensive factory inspection is a first step. We also inspect the entire company: literally. I went to each office building, and to the ink labs and ink production facilities. It is part of a FLAAR evaluation to know the owners, directors, top managers, and also the people in their booth at a trade show.

Next step would be to visit end-user(s): the printshops using these. Since many hundreds of these printers have been manufactured and sold, a printshop visit will happen as soon as I am in the same part of the world near an installation. With over 45 brands of UV-cured printers and more than 101 models, it takes a while to arrange a visit to the one specific printing company with the needed model.



What makes this printer different than most others?

How many UV printer manufacturers really make their own ink?

Only three or four (out of an estimated 45 brands). Sun Innovations has their own ink R&D labs and their own ink manufacturing. I have visited these facilities in 2008 and again in 2012.

How many UV printer manufacturers really make their own LED curing lamps?

Here not even the Japanese manufacturers design and engineer their own LED lamp units. You can tell this, since the largest Japanese manufacturer of UV-cured flatbed printers had to retrofit their principal dedicated flatbed with a secondary lighting system because their LEDs were not curing adequately.

In distinction, Sun Innovations has more than 5 years in-house experience with LED curing. Plus, Sun Innovations has manufactured and sold more of these printers than many successful manufacturers elsewhere in the world. For example, not many UV cured printers made in China has sold (outside China) as many printers as has Sun Innovations. I also estimate that they have manufactured, and sold, more UV-cured printers than all Taiwan companies put together (in the same world areas as Sun has distribution).