News for Offset Printers

Business units Sheetfed and Narrow Web – newly organized

Siegwerk is managed by an organization with six different business units. For many years, the business units Sheetfed and Narrow Web have been working closely together in order to exploit synergies. However, to operate more effectively in both markets, the two business units have been reorganized as from 1st January:

• Bruno Delanoë assumes responsibility as Head of Sales Sheetfed EMEA (Europe/Middle-East/Africa). All the EMEA sales and customer support teams will report to him.
• Marc Larvor takes over the lead of R&D UV, and Samuel Arnaud the role of Head of Sheetfed technology.
• Martial Buttin will continue as product manager for Sheetfed.

Through this new organization, Siegwerk wants to increase its effectiveness and presence in its markets and bring to the customers, wherever they are, the same quality of services and products.

Encouraging results from our Customer Survey 2013

Many thanks to all our customers who participated in last year’s business unit survey. The most positive points which the survey indicated are the following:
• About 95% of the respondents rate Siegwerk positively and are satisfied with its inks and services.
• The consistency of product quality and the supply chain performance are highly valued, likewise the technical guidance and the support.
• 93% of the respondents are willing to recommend Siegwerk to others. Thanks to the feedback, we also have identified opportunities to satisfy the customers even better and we are aware of some particular points requiring individual follow-ups.

New UV dry offset primer for IML

Process: Dry offset
Application: IML
Product number:
OPV LM Primer 75-600548-4
411 LM Hardener 90 71-470074-7

Siegwerk ink experts have succeeded in developing a low migration primer for in-mould labels and wet conditions.

This 2-component UV dry offset primer gives outstanding adhesion on the most difficult substrates and excellent mechanical properties in wet conditions. A typical application for this new primer is the UV printing of in-mould labels for ice cream containers. With standard primers on the market, condensed water on a label’s surface leads to poor wet adhesion and weak abrasion resistance. The combination of this SICURA UV dry offset LM primer together with SICURA PLAST NUTRITEC and LM OPV will offer the printers not only a safe system in terms of migration but also high adhesion levels, even in wet conditions.

Siegwerk awarded in Spain as best supplier

ASPACK is an independent association of packaging manufacturers in Spain. A few years ago, the members of this organization created an award for «best supplier» in order to improve cooperation with suppliers with the ultimate goal of achieving a better quality that benefits all parties and results in greater efficiency for the customer. After an objective analysis of the monitoring done among the ASPACK companies, last year’s award has been granted to the company Siegwerk. The award ceremony will take place at the next meeting to be held on 12th February 2014 in Barcelona. On this occasion, a member of Siegwerk will also give a lecture.
Siegwerk inks certified for good de-inking property

The TEMPO ELITE series has successfully passed the de-inking tests with a score of 81 for coated and 97 for uncoated paper, whereas the threshold to achieve this certification is 71 points.

UV-curing with less energy

In view of the growing awareness of environmental and sustainability issues, together with the increasing cost of energy, Siegwerk is making great efforts in developing UV solutions for the near future.

Technically there are two main trends toward low energy consumption in UV printing: LED-UV (using LED = Light Emitting Diodes) and Low Energy UV (LE-UV). For both new technologies, machines are already in practical use. For both technologies, special inks are needed, and as a matter of course, these inks can be provided by Siegwerk.

The LED-UV technology has already achieved significant successes in flexo printing and also in Inkjet printing. At Labelexpo 2009, Siegwerk was the first ink manufacturer which demonstrated LED-UV flexo ink systems ready for use. At Labelexpo 2013 in Bruxelles, Siegwerk showed at its stand an entire Gallus press equipped with LED-UV curing units in full action. Machine speeds of over 100 m/min were attained without any problem.

While common Mercury lamps emit radiation between 200 and 400 nm, the UV emission spectrum of LED lamps is monochromatic (around 390 nm). This small radiation range was a challenge for the ink engineers since it restricts significantly the choice of photoinitiators. LED lamps do not generate any ozone and therefore no air extraction is necessary. The absence of IR emission develops minimal heat, allows the printing on thin plastic and provides LED lamps a much longer working life. The application of the LED-UV technology for UV offset is continuously ongoing and the developments are well advanced.

Low Energy UV (LE-UV) uses modified mercury lamps which work in a different wavelength range (315 to 400 nm). They are much cheaper in the long term because of using significantly less electrical power. Low energy systems do not generate ozone, and therefore, no air extraction is necessary. They generate much lower IR compared to conventional UV dryers.

The main advantages of LE-UV are:
- lower energy costs
- no ozone generation, no odour
- high speed printing (up to 18,000 sheets/h)
- no need of powdering
- high rub and scratch resistance
- immediate post printing (folding, cutting)

Projects are in progress on high end application like luxury packaging with the objective to print on impervious substrates.

Our colleagues in Sweden wanted to receive the Nordic Ecolabel (Swan Label), a marketing tool to guarantee that products have fulfilled stringent environmental criteria. Inks should comply with properties such as not containing toxic or problematic substances and not being classified as environmentally hazardous. Furthermore, the inks must have the property for print recycling (de-inking). For this reason, Siegwerk Scandinavia sought tests by the famous German institute PTS in Munich (INGEDE method No.11:2012-08).

De-inking is the industrial process using sodium and soaps to remove contaminants like ink, glue and adhesives from fibres of recycled paper to make de-inked pulp. The most common de-inking process consists of blowing air into the pulp suspension. The air bubbles lift the contaminants to the surface and form a thick foam which can be skimmed off. The de-inked pulp is then used to produce a new product i.e. recycled paper or cardboard.