New developments in metal decoration printing

Process: Conventional sheet-fed offset | Application: Metallic packaging
Tempo METAL DEC

Tempo METAL DEC is a complete range of vegetable-based sheet-fed offset inks for metal decoration printing.

The recipes of the series are optimised in order to minimise the risks of odour contamination and migration. Siegwerk ink engineers have succeeded in developing an **outstanding white for this special product range,** whilst it is worth pointing out that the white usually causes problems in metal decoration. This white features **excellent opacity and whiteness,** marginal yellowing after several baking operations and **first-rate receptivity to other colours.**

The inks build a strong surface hardness; this is why the series is particularly suitable for deep drawing of the metal.

Tempo METAL DEC is available in process inks and concentrated bases. The bases can be used for straight printing or for blending and are suitable for all types of 3-piece and 2-piece metal packaging (except aluminium 2-piece cans for beverages).

Examples of printed metal packaging.

HSE Health Safety Environment

Be sure to follow the regulations for food packaging!

UV inks are becoming ever more popular for printing packaging and labels. **In the food area, however, legal regulations have to be observed** which are aimed at preventing the migration of undesirable substances from the packaging or ink into the foodstuff.

Siegwerk has prepared a guide for packagers and printers of food packaging entitled **«Food Packaging Safety»,** which can be downloaded from www.siegwerk.com/productsafety (3.8 MB). The brochure explains, in easily understandable terms, the mechanisms by which migration occurs, the permissible threshold values, the safe use of low migration inks, the categories with increased risk, test methods and validation recommendations as well as the responsibilities. In addition, the guide holds a wealth of practical tips.

Visit our website or contact your Siegwerk application technician.

High productivity with LITHO 900

Process: UV sheet-fed offset, UV web offset
Application: Commercial, packaging
Sicura LITHO 900

This new series was specially developed for UV sheet-fed and UV continuous printing on all kinds of paper and board.

Magazines, leaflets, mailings, books and folding boxes for domestic and industrial products are printed at high machine speeds.

Sicura LITHO 900 features **outstanding printability, high colour strength, fast curing and low misting.** Due to its flexibility and user-friendliness, this series is favoured for finishing operations such as for laser postprinting. The series is compatible with all types of dampening systems using either alcohol minimiser or conventional fountain solutions. The inks remain stable on the rollers and show an exceptional water/ink balance. They comply with the ISO 2846-1 colour standard.

Field Report

Limmatdruck/Zeiler switches entirely to low-migration inks

Limmatdruck/Zeiler is Switzerland's leader in the field of fine paperboard packaging and, as a member company of COPACO Group, one of the top ten in Europe. CEO Ulrich Nydegger explains why his company has switched its entire production to new ink systems with effect from 1 April 2010.

Ulrich Nydegger

«With the new Swiss Consumer Goods Ordinance, controls on the use of inks and varnishes in the food area have been significantly tightened. At Limmatdruck/Zeiler however, we wanted to avoid selective implementation of the new regulations for individual product lines. In order to completely eliminate the risk of cross-contamination and mix-ups, we planned to switch the entire production to low-migration ink systems.

In December 2009, we held an information event at which we informed customers about the proposed measures. We widely tested low-migration ink series from five well-known ink manufacturers, particularly with regard to migration behaviour, sensory perception, runnability and productivity. On 1 April, exactly on schedule, all old inks had been used up and the new **low-migration ink series 'Tempo NUTRIPACK' from Siegwerk** were in use at Limmatdruck/Zeiler.» (www.limmatdruck.ch)

Well Worth Knowing

What is PSO?

With PSO, quality becomes measurable, verifiable and provable!

The Process Standard Offset (PSO) is the description of a standardised procedure for print products. The PSO conforms to the international standard ISO 12647-2. By using PSO, the quality of the production is guaranteed, from data creation to the finished printed product.

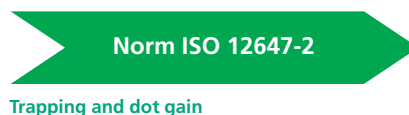Within the framework of standardisation of the offset printing process, the ink manufacturer is responsible for the compliance with the norm ISO 2846-1 which defines the colour and the transparency of a process ink.

Siegwerk has PSO certificates for the inks of the whole Tempo range, such as Tempo ALLEGRO, Tempo NUTRIPACK, Tempo PERFECT, Tempo RALLY, Tempo ROCK.

Responsibility of the ink manufacturer

> **Norm ISO 2846-1**

Colour and transparency

Responsibility of the printer

> **Norm ISO 12647-2**

Trapping and dot gain

Printer/Certification institute

> **PSO Certification**

1. Data reception (ISO 15930)
2. Data creation (ISO 15930 and ISO 12647)
3. Screen display and soft-proofing (ISO 12646)
4. Digital proof – Certification (ISO 12647-7)
5. CTP: Computer to Plate
6. Ink and printing (ISO 12647-2)
7. Lightning and Visual assessment (ISO 3446)
8. Organisation and Documentation (ISO 9001)

Successful «INKday» on 15th April in Istanbul

The new Siegwerk conference concept «INKday» was attended by a great number of professionals from all over Turkey. The topics were up-to-date ink technology for hi-tech sheet-fed and UV printing. Our experts (Martial Buttin on the right) were very busy answering all the questions from the audience.

The Siegwerk claims about low odour and low migration inks aroused great audience interest.
The last INKday event was in Moscow on 27th May and was covering the same topics.

French school for printers PSO certified

On 24st January «L'Ecole des Métiers de l'Imprimerie» in Nantes officially received the PSO certification from UGRA conforming to the norm ISO 12647-2. The printers of the school successfully completed their audit with inks of the **Siegwerk Tempo ALLEGRO** series.