

## CORRUGATED BOARD POST PRINT TUTORIAL – SENOFLEX® - FLEXP POSTER



<b>USP:</b>	Flexographic corrugated cardboard direct printing with high degree of finishing
<b>Effects:</b>	Homogeneous color surfaces with high density   Haptic matt / gloss coating effects   Brilliant gold reproduction
<b>Suitability:</b>	Cosmetics Industry   Food industry   Tobacco industry
<b>Machine requirements:</b>	4-color flexo printing machine for corrugated cardboard postprint
<b>Design requirements:</b>	In order to get along without halftone screening, the design has to be created in such a way that halftones are completely eliminated. For the implementation of the planned high level of finishing, a delicately worked out line conversion of all design elements is realized, which is reflected in the contrasting color play of black, gold and white, as well as in ink effects based on the SENOLITH® WB gloss coating and the SENOSOFT® WB matt coating, realized with a haptic effect.
<b>Description of the effects:</b>	The fact that high degrees of refinement can be achieved with good planning, even with relatively little effort, is demonstrated by a deliberately simple production specification. Thus, the design of this flexo poster is planned to reduce the color gamut to just two inks (black and gold) and the planned finish can also be realized with just two coatings. Furthermore, the scope of production is set to a single machine run, so all forms must be processed inline.
<b>General Description:</b>	In order to demonstrate the possibilities and high qualities that today's corrugated cardboard direct printing offers, plus to demonstrate that high levels of finishing combined with a rich and homogeneous surface coverage are possible through the choice of suitable printing systems and materials, a flexo poster is produced. This is able to show all these qualities, and at the same time serves as a demonstration as well as a reference, for high-quality flexographic corrugated board direct printing.
<b>Remarks:</b>	<p>As with all complex print finishes, clear project planning and coordination of all parameters is essential with companies involved in the production chain. Materials and process steps must be defined in advance and coordinated. For this demo job, the substrate supplier is Metsä Board, the corrugated board company is THIMM, PANFLEX is responsible for the prepress department and Druckhaus Schiettinger is involved in printing. In addition, this job was produced live as part of the SENOFLEX® workshop in the demo center at Göpfert.</p> <p>The key to this high quality print job are the choices made to use a high white EE Flute with MetsäBoard Pro WKL (175 gsm) as liner, MetsäBoard Natural WKL Bright (90 gsm) as flute paper and a MetsäBoard Natural WKL Bright (120 gsm) as core paper.</p> <p>All inks and coatings are provided by WEILBURGER Graphics. Furthermore, WEILBURGER Graphics coordinated production with all involved companies. The print sample was awarded the FTA's 2018 <i>Excellence in Flexography Awards</i>, in the Self-Promotion category.</p>


**Realization:**

Based on the minimal color space consisting of black, gold and substrate white, an elaborate filigree motif created from plant and animal elements was designed.



Live demo production as part of the SENOFLEX® workshop at Göpfert

To illustrate the extremely high pigmentation of the concentrated SENOFLEX® WB HC FP NDC flexo ink that is used for printing, the design uses large black areas. The contours of the design are then worked out in SENOPRINT® WB GOLD and a few design elements are blanked out in white, for a higher contrast and to demonstrate the high substrate quality.

Since the SENOSOFT® WB MATT COATING FP NDC is partially applied to the solid SENOFLEX® WB GLOSS VARNISH FP NDC, only this form has to be created as a spot coating form. By the wet-on-wet inline production possible with these coating systems, a second spot coating form for the gloss coating is not needed, which also contributes to increased production safety.

When creating this matt finish, all the gold features are left out to not reduce the gloss of the gold color. Furthermore, in a deliberately larger black area, the design is once again implemented as a pure matt-gloss effect, completely dispensing with the optical separation through the golden lines.

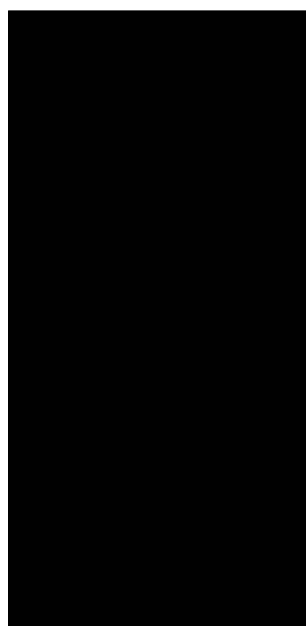
**Produkte:**


The resulting final printing form is then forwarded to PANFLEX for data preparation in open format and as a PDF/X-1a file. For optimum production, 0.33 mm thick overfillings and underfills are created in consultation with the printer and four flexo plates are produced.

In the final print production via a Bobst Masterflex HD, a 10 cm<sup>3</sup>/m<sup>2</sup> anilox roller with 160 lines is then used in the first printing unit (black), a 10 cm<sup>3</sup>/m<sup>2</sup> anilox roller with 120 lines in the second printing unit (gold) and a 13.3 cm<sup>3</sup>/m<sup>2</sup> anilox roller with 120 lines in the third printing unit (high gloss coating). In the last printing unit (SENOSOFT®), a 12 cm<sup>3</sup>/m<sup>2</sup> anilox roller with 100 lines is used.

**Production:**


**PU4:**  
SENOSOFT® WB MATT COATING FP NDC 350215



**PU3:**  
SENOFLEX® WB GLOSS COATING FP NDC 350468



**PU2:**  
SENOPRINT® WB GOLD 871 354711



**PU1:**  
SENOFLEX® WB BLACK HC FP NDC 395080