

Corrugated Cardboard Direct Printing Tutorial – SENOFLEX® Arrowbox



USP:	Flexographic corrugated cardboard direct printing with a slight degree of finishing
Effects:	Brilliant colour reproduction with high density Haptic matt coating effects
Suitability:	Cosmetics industry Food industry Tobacco industry
Machine requirements:	6-colour flexo printing machine for corrugated cardboard post print
Design requirements:	On the outside plain reproduction of a brown corrugated cardboard, on the inside colour-rich coloured surfaces, which convey dynamics and modernity and show the possibilities of high-quality corrugated cardboard direct printing by means of highly pigmented SENOFLEX® flexo inks.
Description of the effects:	The fact that four-colour reproduction in the corrugated cardboard post printing is possible with high brilliance and original fidelity is to be shown by an optimal art reproduction in the four-colour space. In addition, a haptic effect is incorporated by means of SENOFLEX® matt coatings, which is additionally used on the outside to visually and haptically enhance the illusion of using brown corrugated cardboard.
General description:	This project aims to present a current trend in online retailing to increase the unpacking experience of shipping packages (moment of truth) for the buyers. For this purpose, more and more shipping packaging is designed and refined inside but should continue to look inconspicuous and neutral from the outside, to avoid theft in the logistics chain. The interior design of this packaging utilises a specifically created graffiti image by the well-known street artist Jo di Bona. The preservation of the appearance and the highest-quality four-colour reproduction of this graffiti design using highly pigmented SENOFLEX® flexo inks is thus another challenge that one wants to face here.
Remarks:	<p>As with all complex print finishes, clear project planning and coordination of all parameters with all companies involved in the production chain is indispensable. Materials and process steps must be defined in advance and coordinated. For this demo job, the substrate supplier is Metsä Board, corrugated board company THIMM, PANFLEX for prepress, and the company THIMM, with a Göpfert HQPP machine, for printing.</p> <p>The key to this high quality print job are the choices made to use a high white EE Flute with Metsä Board Pro WKL (175 gsm) as liner, Metsä Board Natural WKL Bright (90 gsm) as flute paper and a Metsä Board Natural WKL Bright (120 gsm) as core paper.</p> <p>WEILBURGER Graphics provides all inks and coatings. Furthermore, WEILBURGER Graphics coordinates the production with all participating companies. The Metsä Board creative office in Shanghai prepared the design.</p>



Realization:

First, the surface of a kraftliner is scanned for the exterior design of the packaging and reproduced in two colours. For this purpose, the filigree structure of the kraftliner is adjusted on a solid surface made of Pantone 729 using SENOFLEX® WB BLACK HK FP NDC 395080.



Presentation of packaging by Bernhard Arndt at the fourth SENOFLEX® workshop of WEILBURGER Graphics GmbH

Subsequently, the design of the packaging is based on the punching contour, specially designed for the EE wave. All outer surfaces of the shipping packaging are for this purpose covered homogeneously with the reproduced corrugated board surface and, to avoid too much colour outside, all partner logos visible there later, as well as further information are designed in white. Thereafter, the image of the graffiti is incorporated on all interior surfaces. It must of course be ensured that the motif transitions in the final packaging are arranged to fit together seamlessly. On the inner surfaces, the partner logos as well as the digitized signature of Jo di Bona are now fitted into the graffiti design in white at dedicated locations. Furthermore, a coating form for the inline application of the SENOFLEX® WB MATT COATING FP NDC LA 6-21/022 A is applied.

The true colour reproduction of the graffiti design is made possible by the company PANFLEX based on the defined fingerprint of the original, the printing system used, the substrate and the highly-pigmented flexo inks.

Since the quality of the flexo plates is also crucial for this reproduction, only nyloflex® FTC digital flexo plates from FLINT are used, with the latest flat top dot technology, a cliché thickness of 2.84 mm with a 1.7 mm foam base. The screening is 42 L/cm. The plates are also exposed at PANFLEX.

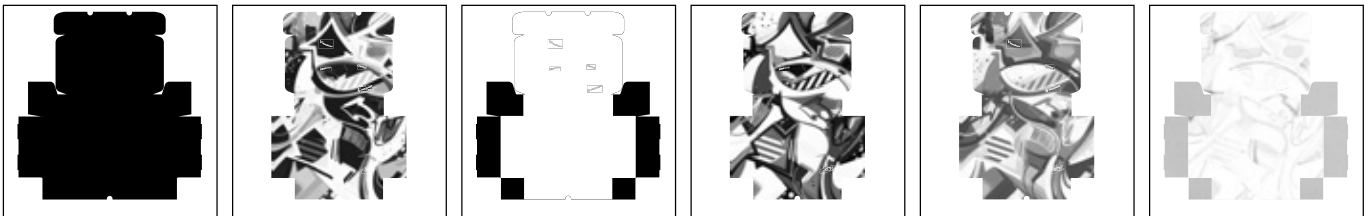
Products:



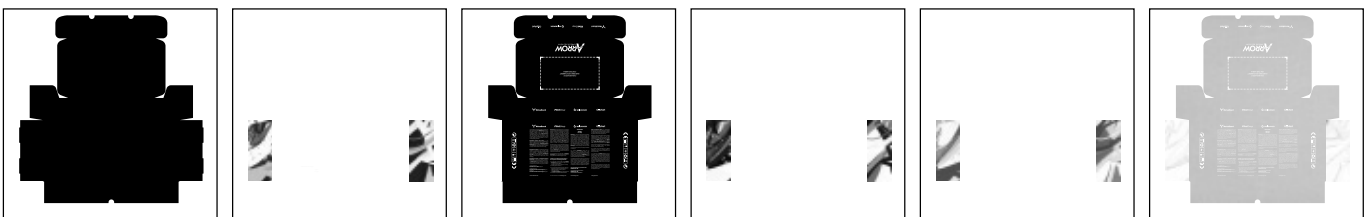
During the final production at THIMM Obaly in Vsetaty on a Göpfert HQPP machine with inline-rotary die-cutting, SENOFLEX® WB BLACK HK FP NDC 395080, SENOFLEX® WB CYAN HK FP NDC 395050, SENOFLEX® WB MAGENTA HK FP NDC 395030 will get printed with three 4.7 cc/sqm anilox rolls with 280 lines. In the fourth printing unit (special colour SENOFLEX® WB P 729U) a 7.8 cc/sqm anilox roll with 140 lines, in the fifth printing unit (SENOFLEX® WB YELLOW HK FP NDC 395010) again a 4.7 cc/sqm anilox roll with 280 lines and in the sixth and final printing unit (SENOFLEX® WB MATT COATING FP NDC LA 6-21/022 A) a 12 cc/sqm anilox roll with 80 lines will get used.

Production:

Printing (inside packaging)



Reverse printing (outside packaging)



PU6:
SENOFLEX® WB MATT COATING
FP NDC LA 6-21/022 A

PU5:
SENOFLEX® WB YELLOW HK
FP NDC 395010

PU4:
SENOFLEX® WB
Special Colour
P 729U

PU3:
SENOFLEX® WB MAGENTA
HK FP NDC 395030

PU2:
SENOFLEX® WB CYAN HK
FP NDC 395050

DW1:
SENOFLEX® WB BLACK HK
FP NDC 395080