SANNER

Protecting Health.

Sanner – Offset-Printing (Letterset-Printing)

Guide to process reliability in the offset process

Sanner – Offset-Printing (Letterset-Printing)

Many years of know-how and high quality in the classic offset high-speed printing of plastic effervescent tubes characterize us. We can print all common tube sizes with up to 8 colors in offset HD technology in different color variations and nuances. We use low-migration paints and varnishes that comply with international pharmaceutical and food standards.

Of course, our service includes the entire print data management and support in the process from design to the finished tube. The printing image that we receive from our customers is divided into as many clichés as there are colors (maximum 8 colors). Each cliché automatically represents a single part of the printed image on the tube and gradually all the colors are transferred to a rubber pad. At the end of this process, practically the entire printed image is reproduced in color on the rubber pad. Then the various parts of the printed image are transferred from the rubber pad to the tube in one operation and then dried. Attention, sometimes for one and the same color two or even more clichés needed. This is necessary, for example, if the color occurs in more than two fonts or font sizes or color areas of different sizes. Finally, the tubes are varnished so that the colors of the printed image remain on the tube and cannot be wiped off.

The offset printing process enables higher printing speeds and is therefore particularly suitable for larger print runs. The tubes are printed exclusively on the basis of Pantone colors.

1. General

Possible tube formats

All tubes with a tablet diameter of 18mm to 35mm (in some cases, wider or narrower tube formats upon request).

Printing process

offset printing process
(incl. flaming and coating of the tubes for perfect adhesion of the printing inks on the tube)

Color

We recommend creating the designs in Pantone colors.

In addition, please note:
Standard: max. 8 colors

2. Guidelines for creating the print data

The customer is responsible for the correct, print-ready data delivery in accordance with the points below. In particular, when checking the release of GzD PDFs (Okay for Printing PDF) and, if requested, the associated color proofs (GMGs), the customer checks for correctness himself as a final check.

General review

format / lay-out
Correctly used tube drawing including compliance with the safety zones specified therein.

colourfulness
Texts (e.g. spelling)

legibility (e.g. minimum font size)

EAN code

Permissible formats for print data delivery

Esko AE 20.1.0 (also ArtPro files)

Adobe CC Cloud 2021

(Photoshop, Illustrator, In-Design, PDF)

Quark: X Press

Warning: for security reasons, no Excel and/or Word files will be accepted. (Please convert to PDF)

color mixes

Mixing different inks comes with limitations:

Printing two spot colors on top of each other contaminates the colors when they are transferred to the rubber blanket.

With each rotation, a more and more mixed printing color „soils" all the others with it.

Consequently, replace heterogeneous ink areas, e.g. yellow and blue, with e.g. Pantone green.

four-color printing

Overlaying the four CMYK colors (cyan, magenta, yellow, key) is not possible with offset printing.

Direct tones

The color separation in offset printing forces a selection of miscible color shades that should be arranged according to their color dominance.

Pictures in full HD

The criteria for printing an image in Full HD requires sophisticated skills & software.

Here's how the offset press operator prepares the printed image for offset printing using ColorTone (Esko).

Please deliver your print data immediately, taking Pantone colors into account.

A conversion from CMYK to Pantone colors always involves additional costs.

With ColorTone you can achieve a perfect fine tuning of the color balance.

Contrasts, light areas and ink overlays (PCR/GCR).

Blurs or residual points are resolved efficiently.

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Text Defaults

The minimum engraving of the positive texts / reserves / grids.

The size of the texts (readability).

Compliance with the printing area plan.

The separation of the printing colors / the color distribution / your Pantone conversion.

The superimposition of the inks / their miscibility compatibility.

Optimizing the values of an image for full HD resolution playback.

Compliance with the source file (Eye C certificate).

The representation of certain elements is not contractually binding

The Pantone color profile (CVC profile) of .pdf file differs greatly from the paper color palette.

This variable is random and depends on the quality of the screen and its calibration.

The percentages of the screened values are compensated for fatness and appear lighter.

lineweight

Positive / negative single color 0.10mm

Minimum size of texts or printable characters

Positive / negative monochrome 5 pt

Positive / negative multicolored 6 pt

If corrected by the customer

Please send a new correction file.

With correction by Sanner France

If possible, please specify the font used. (Requires full proofreading of the texts by the client).

Sanner reserves the right to use the same color on two or more printing blocks, e.g. if one and the same color is intended for both a text and a color field on the same printing block.

color grid

A color is rasterized in order to obtain lighter gradations - if, for example, a solid red area is divided into small areas, one obtains a bright red through raster points.

For example, printing a cube pattern takes up 50% of the hue and leaves

50% White Left: The halftone percentage is proportional to the colored area.

The fineness of the screen dots is set in the number of lines per inch (lpi).

Standard cliché: 130 lpi

Large rastered areas result in solid areas in a lighter colour.

Screened areas harbor risks: Disappearance of individual dots/letters, blurring or illegibility of texts, truncated contours, splashes of paint. Replacing a grid with a light shade on the solid can be an effective alternative solution.

Attention Danger of dot fattening in offset printing

Color screen areas from 1% to 30% experience a dot fattening of 20% when printing on the tube.

Smallest printable dot for color screens: 20%.

The minimum score of 1% for the successful printing of gradations, contrasts, modeling as well as light and shade must be observed

Other Notes

Constriction: should be avoided.

The thickness of the letters of text fields over a colored area: 0.25 mm.

Vectorized texts are fully secured.

Artwork customization

Adaptation to the requirements of offset printing requires at least comprehensive control of the print images and clichés by an offset printing machine operator.

Sanner offers its customers the skills required for dry offset printing on PP tubes, however, there are limitations.

For a full HD letter set result, Sanner reserves the right to convert to Pantone for each color profile and to make chroma corrections.

Deliver code as a separate file and do not embed it in the print image.

Requirements for EAN & Barcode

EAN / UPC code from SC 0: all of the following points contribute to the perfect legibility of the code:

Min size 80% & do not place code at injection point.

Create high contrast between EAN and Ideally create in black or dark color (additionally red & orange).

„Bright Zone" by. Allow at least 3 mm when creating the print image for the code.

Do not scale codes after creation.

Ideally place the code perpendicular to the print direction.

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3. Data transfer

If you have observed all the points listed above and now want to transmit the data to Sanner, please do so:

By email (to your contact person)

By download link (WeTransfer)

4. Print Approval Process

Step 1

The customer delivers the print data to Sanner in accordance with the above-mentioned guidelines.

Step 2

The customer receives a release PDF („OK for printing" PDF) for checking and approval.

The "OK for printing" approval is automatically also the contractual confirmation that the clichés can be created.

The submission of the „OK for printing proof" confirms to the customer that the graphic elements conform to the specifications for dry offset printing.

Subject to the terms set forth in the applicable specification, this OK to Print commits you to agreeing to:
* to the texts,
* for color separation,
* to the shades indicated.

Step 3

The customer confirms the print approval by e-mail with signature and date to Sanner.

Sanner – Offset-Druckverfahren (Letterset-Printing)

The following drawing can help you create your print design

Grid Areas

Special precautions are required when printing halftones. That is why they are printed on a separate plate.

Effect occurred at the edge of the area:

- shearing,
- point losses,
- distortions,
- Antialiasing settings

Rasterized black text and lines are converted to Pantone (430).

GROUP

Pantone Grey 430

Black screen values

Black has the highest density.

EXCESSIVE OVERPRINT is required to preserve the high density of text and backgrounds. As a result, the dots become HIGH DENSIFIED and the halftone appears darker than normal. A single dot on the photopolymer printing plate can ruin and smudge the print.
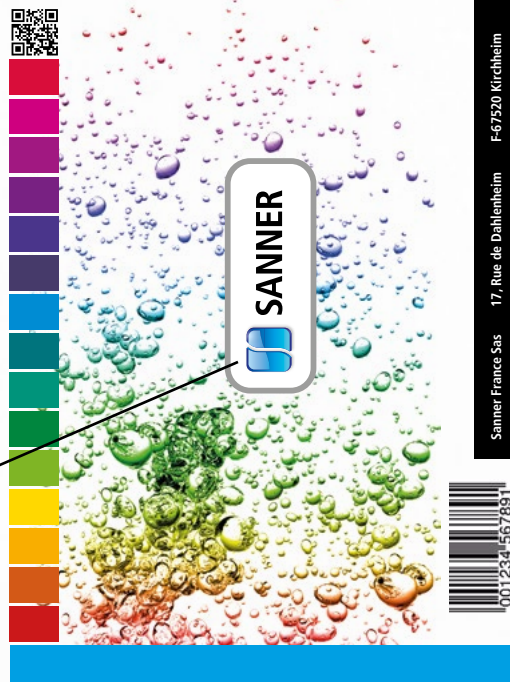
Data Matrix

Depending on the properties of the DataMatrix QR code, a diagnosis is required.

Stripe effects in color gradients

In bright areas (dots from 1 to 20%), the dot gain is around 25%, so the color gradient ends with an edge.

The effect is intensified with dark colors.

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Positive and reverse texts

Tube   font size 6 PS-Pts

0,25 mm MiNi

Tube   Font size 5 PS-Pts

0,25 mm MiNi

Barcode

The minimum barcode size is 80%. Officially 30 x 10mm. Bar width reduction by 0.015 mm. Left margin 4 mm. Right margin 3mm. Dark colors only. With the exception of red, orange and yellow. Reading direction perpendicular to the tube.

Full HD resolution image

four-color process
- Four-color overlays are not possible with dry offset.

For a high-resolution result
- Sanner converts the image to Pantone using color profile and color treatment.

At least 300 dpi is required for the image resolution (at 100% scaling).

overlap

The inking area has a thickness of 1 mm. The imprint is darker on 1 mm. The color must be the same.

Pantone 072 on 3 separate Platters

- BLUE 072 thin text
- BLUE 072 Grided
- BLUE 072 single-color

finesse

- Minimum line width 0.1 mm
- Minimum diameter for legibility 0.9 mm

Sanner Printing Team

If you have any questions or clarifications, do not hesitate to contact one of our printing team.
For this purpose, the following contact persons are at your side for orders:

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