

Requirements for the artworks used for flexographic CMYK printing of vacuum bags and films

Acceptable file formats

Adobe Illustrator, any version, all fonts must be in curves Adobe PDF, any version, all fonts must be in curves

*Raster images must be linked to design and submitted together with the artwork file.

Parameters of raster images used

File formats: TIF, PSD.

Graphic resolution: **300 dpi** (output with lineature of 110 lpi and resolution of 2540 dpi).

Minimum allowable raster percentage: 10%.

Gradient fills (both vector and raster) must not 'zero out'; the upper limit of the halftone range is **90%**,

the lower limit of the halftone range is 10%.

The range is extended from 1% to 98% for designs to be printed using Kodak Flexcel NX technology.

Maximum number of print colors

From **1+0** to **10+10**

*Two types of printing are possible: CMYK (number of colors 10+10) and multicolor

(number of colors 8+8) without using <mark>CMYK</mark> colors. *The Pantone palette colors can be selected from a strictly limited list (provided on request).

4 Geometric dimensions of artworks

There are two types of printing on vacuum bags: non-positioned printing (printing on bags without any precise orientation of the image against the bag), and positioned printing (printing with precise orientation of the image against the bag while centering the image against the product placed into the finished bag). The artwork length can be selected from the following options: **423, 476, 528, 581, 633, 686, 738 mm**. The design of a bag with a positioned image must take into account the presence of the mandatory process marks.

5 Process break*

It is advisable to include a process break between the print elements, while keeping the process break length to the minimum. Length of a straight process break: not less than **5 mm**. Length of a shaped process break: not less than 8 mm.

'A process break is a transverse band on the image, which appears because of the need to fasten the end parts of the printing plate on the printing cylinder. This problem is encountered only when using the traditional photopolymer printing plates.

6 Requirements for white-colored elements

The presence of a white color is obligatory for the artworks to be used for printing upon colored casings. The casing color may be used as an additional design color.

Bright or dark casings must have a double white color, because a single white will not ensure the required whiteness, which would lead to wrong shades of all other colors.

7 Requirements for artwork elements

Minimum width of a separate line or dot printed in a single color:

- 0.3 mm (positive print);
- **1 mm** (negative print).

Minimum width of a separate line or dot printed in two or more colors:

- 1 mm (positive print);
- 2 mm (negative print).

Minimum size of a 'positive' font printed in a single color: **6 pt**; Minimum size of a 'negative' font printed in a single color: **8 pt**;

Minimum size of a font printed in two or more colors (positive/negative): 10 pt.

Texts in fonts of **10 pt** can be printed using 2 colors (one of which 100%).

Texts in fonts more than **14 pt** can be printed using 2 raster colors.

For texts in fonts less than 8 pt it is advisable to avoid fonts with very thin elements (serifs, bridges, etc.).

*These requirements refer only to the elements that must be reproduced by printing without distortions or defects (the semantically charged elements).

*The artwork design must take into account the vertical misregister of up to **0.3 mm** for each color.

Address your questions and additional queries to the following contact persons: