Print material

Useful tips for offset and digital printing.
For the production of a printing product you need to comply with certain parameters for the given printing technology to ensure the best possible printing quality. Here we list some printing technologies with their parameters. We would like to point out, that the criteria can vary with technology and printing plant, so we recommend to have to consult with us the first few times.

Offset printing

- At the moment this is one of the most popular printing methods. The embossing happens per color by means of an aluminum plate, that has e special coat.
- This method is more economical with a relatively high production number, since the costs for the plates and the machine start spread out on the whole production. The general parameters are the following:
- **File Format: Printing PDF file**. This means that you have to distill a PDF file out of a PostScript File with a special software (usually Adobe Acrobat Distiller). We call this an actual PDF file. This method keeps the possibility of mistakes minimal.
- Exported or simply as PDF saved files aren't actual PDF files. They can generate many unpredictable mistakes, which can only be seen at printing or in worst case on the finished product.
- There are mostly problems with characters or graphics with different kinds of elements (e.g. shifted characters, accents of letters appearing wrong, effects like transparency don't appear correctly etc.…).
- **Picture (elements with pixel graphics):** They need a **resolution of at least 300 dpi** (dot per inch). That's mostly enough for colored pictures. It's not necessary to have a higher resolution, since the file only becomes unnecessarily big and is complicated to handle.
- We recommend TIFF format for picture files without layers and with a LZW compression. Like this we can avoid a high loss of quality, which we experienced with JPG.
- **Regarding the coloring only the CMYK model (subtractive color mixing) is suitable.** An exception is material with direct colors. Here the colors won't be created by the four basic printing colors (cyan, magenta, yellow, key-black), but with a pre-mixture (direct colors). Mostly the use of direct colors means higher costs. If the quality of the 4 color printing fits, the direct colors have to split up into the 4 basic colors. One has to be aware, that the most direct colors can't be reproduced in the CMYK color scale. RGB color material can't be printed with offset technology!!! This is one of the most common mistakes at the delivery of printing material.
- Definition und handling of the bleed: There has to be a so called bleed, if the graphic is as big as the cut size of the product. For example if a flyer is completely filled with graphics, then the graphics have to be bigger, than the flyer itself. Just imagine a tablecloth that hangs over the edge of the table. This part of the graphics will be cut off in process, so there shouldn't be any significant parts on it. It is necessary, because the edges can relocate a little at the printing and post processing.
- **The size of the bleed is usually 3-5 mm.**
- If the bleed is missing, it can happen that there are white, unprinted parts at the cutting edges.
- For the same reason (inaccuracy at printing and cutting) it's not recommended to place significant graphical parts or texts within these 3mm of the bleed.

- Cutting line: A narrow line, which marks the cutting. This line is necessary in any case. Like this the cutting size can be defined explicitly without misunderstanding. We recommend making the cutting line with a distance of the wide of the bleed.
- The cutting line is mostly 0,2 mm wide and 3-5 mm long and is in a fitting color, that contains 100% of every color.
- Usually the programs automatically place these signs with the parameters given by us (optional).

You have to consider the following for the stamping line of the graphics:

- Right side: leave a 5,5 mm white frame, after that the coloring can begin. Visible graphics and texts come after 9 mm
- Bottom-top: leave a 5 mm white frame, after that the coloring can begin. Visible graphics and texts come after 12 mm
- Left side: a bleed of at least 2-3 mm (not more)
- Consider the bend of the stamping
- Graphics with the necessary resolution with stamping lines and one without stamping lines needed (so for every cup size and graphic you need 2 printing files).