## **Requirements for Print Data**



Large format digital printing ("Großformat-Digitaldruck")

Please make sure to observe the following information for correct print file preparation. We can only achieve a perfect print result if your print data is prepared correctly. In order to ensure the fastest and smoothest possible ordering process without time-consuming queries, we have prepared this detailed information sheet for you: A checklist (p.1) and then a more detailed version with precise explanations (p.2-3).

This factsheet only contains information for large format digital printing. For other products please use our other factsheets.

#### Download now:

- Requirements for screen printing
- Requirements for accreditation

### Checklist

#### 1. File formats/File structure

- » PDF/X-4 (PDF-Version 1.6)
- » Print data in final format (order format)
- » Motifs above 5 m in a scale of 1:10
- » Each motif in a separate file
- » Convert fonts to paths (or at least embed it)
- » Distance of important objects from the edge:
- > Plates and Foils = 1 cm
- > PVC Banner & Mesh = 4 cm
- > Textile Materials = 5 cm
- » No layers (execption: contour cut)
- » Keep file size as small as possible (e.g. by saving as optimized PDF with Acrobat Pro)
- » All objects within the data must be embedded in the document

#### 2. Bleed margin

- » no additional print markers (crop marks etc.)
- » Create the bleed separately from the final format within the bleed box (Trimbox + Bleedbox)
- » PVC Banner & Mesh: 3 mm bleed on all sides
- » Textile Materials:
  5 mm bleed on all sides
- » Plates and Foils:
  3 mm bleed on all sides

▲ ATTENTION: Please observe the scale!

#### 3. Colours

- » Colour Mode: CMYK
- » Output intent (Colour profile): ISO Coated v2 (ECI) <a href="http://www.eci.org/de/downloads">http://www.eci.org/de/downloads</a>
- » No spot colours, Lab or RGB

▲ ATTENTION: Spot colors, RGB and Lab are automatically converted to CMYK.

A colour accuracy of CMYK can only be achieved by a previously agreed proof.

#### 4.Black composition

Deep black:

C=40, M=40, Y=40, K=100

▲ NOTE: A achromatic composition of black results in a dark gray in digital printing.

#### 5. Resolution

- » Motif in original size:
- > PVC Banner: at least 72 ppi
- > PVC Mesh: at least 50 ppi
- > Textile Materials: at least 150 ppi
- > Plates and Foils: at least 150 ppi

▲ ATTENTION: A scale of 1:10 requires 10 times more resolution (e.g. 720 ppi instead of 72 ppi).

#### 6. Contour Cut

- » Create cut line as closed contour
- » Create contour line on a separate layer in spot color 100% magenta
- » Layer name and name of colour field: Cutpath
- » Bleed margin: 3 mm on all sides
- » Export with Acrobat layers

#### 7. Data delivery

- » After your order you will receive a link to our upload area, where you can load up your print data
- » Accepted file formats: JPEG, TIFF, PDF, EPS



### **Detailed information**

# structure

1. For a smooth workflow we need your data already as print-ready PDF in the File formats/File standard PDF/X-4 (PDF version 1.6).

> Please make sure that the data is already created in the final format. The final format must correspond to the format of your order or the format of the ordered product. Since the maximum document size of a PDF file is limited, all motifs over 5 m must be created on a scale of 1:101. (Creating a file in 1:10 also results 1 Example: A motif with in different requirements regarding resolution and bleed, see points 2. & 3.)

the original size 7000 mm x 3500 mm must be created in a format size

If you also want to order different motifs, each motif must be saved in a sepa- of 700 mm x 350 mm. rate file.

If fonts are used in the document, they must be embedded. You can check embedded fonts manually in the document properties under the "Fonts" tab. In this tab, the comment "Embedded" or "Embedded subgroup" should be placed after the respective font.

In some cases we may need to edit or modify your files manually. Then the embedding is not sufficient, in this case the font must be patched<sup>2</sup>.

When creating print data, place all important objects (texts, logos, important graphics) at a sufficient distance from the format edge. The distance depends on the selected material. For sheets and foils the distance should be at least post-processing. 1 cm, for PVC banners & mesh 4 cm and for textile materials 5 cm. If you do not comply this distance, objects may be cut off or seams and eyelets may go through these objects.

2 For a smooth and time-saving ordering process, we recommend that you always path fonts. This avoids

Always place your motif on one layer only. The only exeption is for contour cuts.

Make sure to keep the file size as small as possible. To do this, you should, for example, not set the resolution higher than required or save large PDF files as optimized PDF using Acrobat Pro. Files should not exceed a size of 250 MB

All objects used within your print file (images, logos etc.) must be embedded in the document. Linking the objects is not sufficient and, in the worst case, will result in the respective object not being printed.

2. As there may be minor deviations in cutting during the further processing Bleed margin of printed products, each motif should be created with additional bleed. It is essential to ensure that the bleed is applied separately in the bleed area and not in the final format frame. This avoids white edges (so-called flashes). The size of the bleed depends on the material:

> > PVC Banner & Mesh: 3 mm bleed on all sides Textile materials: 5 mm bleed on all sides > Plates and Foils: 3 mm bleed on all sides

Please note: With a scale factor of 1:10, the changed size of the bleed must also be taken into account 3. In addition, the background and objects at the edge 3 Example: A motif must reach into the bleed box. Please do not create printer marks (crop marks etc.) when adding bleed.

in original size needs a bleed of 5 mm all around. On a scale of 1:10. the motif requires a bleed of 0.5 mm all around.

3. In digital printing, the colours cyan, magenta, yellow and key (black) are used Colours exclusively for colour reproduction. Therefore, all colours contained in the document should already be created in CMYK colour mode.

> Please note: If RGB, Lab or spot colours are contained in the document, they are automatically converted to CMYK. This can lead to colour changes during conversion.



Please use the color profile ISO Coated v2 (ECI) as output intent. The output intent specifies the output purpose for which the file was created (newspaper printing, offset, etc.). You can download the ISO Coated v2 (ECI) profile used by us at http://www.eci.org/de/downloads

- > Colour mode: CMYK
- > Output intent (colour profile): ISO Coated v2 (ECI)
- > No spot colours, RGB or Lab

Please note that CMYK are device dependent colors. This means that the color reproduction in CMYK is not 100% color-consistent. External influences also have an effect on the colour result. For exact colour reproduction, a colour proof must be agreed in advance.

**4.** If you want to achieve a deep black for objects within your file, we recommend **Black composition** a color structure of:

Cyan = 40, Magenta = 40, Yellow = 40 and Key = 100.

If you build up the black exclusively in 100% K, the optical impression of the colour after printing will be more in the dark grey area.

**5.** For an optimal printing result, the necessary resolution must be observed for **Resolution** pixel objects within the print data. The resolution depends on the base material:

» PVC Banner: at least 72 ppi

» PVC Mesh: at least 50 ppi

» Textile materials: at least 150 ppi

» Plates and Foils: at least 150 ppi

With a scale of 1:10, the resolution must accordingly be 10 times higher (e.g. 720 ppi instead of 72 ppi).

The resolution cannot be improved afterwards and always depends on the quality of your source data. Note: File formats such as JGEG, TIFF and PNG are always pixel-based. eps data may also contain pixel data.

- **6.** If you would like your print product in an individual shape, there are a few import-**Contour cut** ant points to consider when creating the print data:
  - » The cut line must be a closed contour line (no surface) and must be created on a separate layer.
  - » Name the separate layer "Cutpath".
  - » Create a separate colour field in spot colour for the colour of the contour line, with the name "Cutpath" in 100% magenta.
  - » In order to avoid white edges (flashes) in case of possible cutting deviations, add 3 mm bleed all around.
  - » When exporting the file, the Acrobat layers must also be exported (so that the PDF has a design layer and a layer with a contour line).

Please note that the contour line should be the outermost boundary of the file and thus correspond to the order format. The bleed must be created separately in the bleed box.

7. After your order you will automatically receive a link to our upload area. Please **Data delivery** use this to upload your print data.

We accept the following file formats:

> JPEG, TIFF, EPS, PDF