



# Digital Artwork Transfer in Folding Carton Production

Guidelines on the Standardisation  
and Transfer of Print Data



**New!**  
Requirements of  
the Reference PDF  
in Relation to  
Digital  
Checking



PAPIERWERK LANDSHUT MITTLER



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## Digital Artwork Transfer in Folding Carton Production

In order to ensure that agents, customers and producers of folding cartons work together effectively, it is necessary that each of the parties involved adheres to standardised procedures. This contributes to much greater production certainty and efficiency.

In addition, agreements should also be made regarding responsibility for archiving and corrections.

Of particular importance in this respect is the associated in-process communication and documentation.

These guidelines are intended to provide the basis for constructive partnerships. Non-observance of these guidelines can result in additional costs and time delays.



## Folding Carton Files in Graphic Form

### Cutting Template

The graphic construction must be based on the original cutting template drawing. Upon request, plm would be happy to provide you with this drawing in the form of an EPS, Illustrator or PDF file.

The cutting template must have its own assigned colour in the file. The use of CMYK (euroscale) is not permitted for the purpose.

### Layout

Bleed-edge elements are to be supplied with an excess bleed-edge of 2 mm. The distance between cut lines and graphic elements should not be less than 2 mm.

In general, attention is to be paid to precise placement, especially when using circumferential design elements.

### Colours

Every colour used in the document must be provided with a colour separation, with a clear distinction made between CMYK (euroscale) and special colours. Finishes (varnish, foil or blind embossing) are to be treated like separate print colours.

RGB colours are not permitted. A clear print colour legend must be inserted within the document page.

### EAN / PZN

Instead of a code, a placeholder indicates the exact type and size of the code to be inserted. Make sure there is sufficient contrast between it and the background colour.

## Technical Prepress Requirements

### Resolution

In order to reproduce halftone images on a 60-screen ruling, a resolution of 300 dpi is required.

The scan resolution of line images should be at least 1200 dpi, with an optimal dpi being 2400.

### File format

Images can be provided in the EPS and TIFF formats.

Please avoid using rough data or compression formats (e.g. DCS and JPEG).

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### Colour separation

Optimal results in folding carton printing can be achieved with 4-colour separation according to the following criteria:

- tonal value increase of 15%
- GCR with medium black generation
- maximum colour application of 280%

The parameters set during colour separation can no longer be identified when the CMYK image file is transferred to us. We assume that they have been correctly set.

### Trapping

Any necessary traps (spread/choke) must be taken into account. The standard measure amounts to 0,1 mm. If smaller thicknesses are desired, special clearance is required.



## Technical Data Requirements

### File formats

We accept files in the preferable file formats ArtPro and PDF.

We also process files from the following applications.



- Adobe Illustrator
- Adobe InDesign
- Macromedia FreeHand
- QuarkXPress

However, a PDF file\* must always be provided for reference purposes. Alternatively, a printed version which is binding in terms of size and text can also be sent.

*\* For requirements relating to the reference file for the digital check, please see page 9*

## Data Transfer

### e-mail transfer

grafikdaten@plm.de

### ISDN transfer

ISDN Leonardo (Mac)

+49 8702 8528

### FTP

The required access data (folder name, password and server IP address) is available from us on request.

## Information Relating to the Reliable Transfer of Data

### Fonts

Fonts must always be converted into paths. If this should not be possible (e.g. QuarkXPress), all the fonts must be included in delivery (Screen and PostScript fonts). In print PDFs, all fonts must be embedded.

### Images and Logos

All images and logos used in the files, insofar as they are not embedded, must be sent along with the files.

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### Transfer

All data must be compressed (packed) before uploading (e.g. StuffIt or Zip). Data which is not compressed, particularly in the case of fonts, is liable to become damaged during transfer, rendering it unusable.

*Failure to observe these guidelines will generally result in additional costs which will be charged on the basis of actual costs incurred. In addition, we also request that you take responsibility for carefully checking the required correction proof, because the associated processing involved may result in changes to the contents.*

***Please also observe our checklist on page 10***



## Check Media for Colour

### **Colour-consistent proofs**

We treat those proofs, analogue and digital proofs that include the FOGRA media key as colour-consistent for scale printing! If this is not the case, plm reserves the right to generate a comparative proof and invoice it accordingly.



In the case of the proof it should be remembered that only CMYK colours can be shown in binding form.

### **Colour Sample**

Physical colour samples shall serve as binding samples for special colours.

## Requirements of the Reference PDF in Relation to Digital Checking

The digital check involves the use of software to compare the graphic file created by PLM, or the printed folding carton, with the proof/reference file released by the customer. In order to be able to use this system to optimum effect, the reference file must meet the following requirements.

- The reference file must always be a PDF file only
- The dieline must be provided in a colour which is not otherwise used in the document  
*(no CMYK (euroscale) colours)*
- Finishes (braille, varnish, embossing, etc.) must be provided in a separate colour  
*(no CMYK (euroscale) colours)*
- All fonts in the PDF must be embedded
- The PDF file must not be scaled
- There must be no corrections in the PDF file
- The PDF file must have a suitable resolution, ideally 1200 dpi
- All elements (graphic, dieline, braille, etc.) must be on page 1 of the PDF file

*Please also observe our checklist on page 10*

## Checklist Print File

### PDF

- All colours (special colours) are still contained in the PDF
- All fonts are embedded
- All half-tone and colour images must have a resolution of at least 300 dpi
- All line images must have a resolution of at least 1200 dpi
- Pictures must not be compressed (e.g. JPEG)
- The file must be of a scale of 1:1
- A trim of 2 mm is required

### Open Data

- The colour mode must not be RGB
- All fonts must be converted to paths (or included with delivery)
- All half-tone and colour images must have a resolution of at least 300 dpi
- All line images must have a resolution of at least 1200 dpi
- All pictures and logos must be included in delivery (or embedded)
- The file must not contain any OPI references
- The file must be of a scale of 1:1
- A trim of 2 mm is required

## Checklist Reference File (PDF)

- The dieline is in a separate colour (no CMYK (euroscale) colours)
- Finishes must be in a separate colour
- All fonts are embedded
- The file is not scaled
- All elements (graphics, dieline, braille, etc.) are on page 1 of the PDF
- The PDF file has a sufficiently high resolution



## Little Helper

At our homepage [www.plm.de](http://www.plm.de), under “Downloads”, you will also find the following “little helpers” in both German and English to supplement this document:

- Job options for Acrobat Distiller for creating printable PDFs
- PLM reference profile for digital proofs



### Imprint

conception, design and production:

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## Quality is no accident

A love of the job, perseverance and discipline are the requirements for achieving order in production processes. The reward: transparent workflows, minimisation of errors, faithfulness to delivery deadlines, greater efficiency and satisfied customers.



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