

Guidelines for data creation and data handling



Data basis

Basically, we distinguish between reproducible and print-ready data.

Reproducible data

must be processed or corrected after receipt to generate print-ready data. This data preparation creates extra costs which will be invoiced separately.

Print-ready data (PDF)

is created by you according to our specifications. This data can be incorporated directly into the workflow and does not have to be revised additionally.

Data transfer

FTP server

Transfer via FTP server is a very fast form of data transmission. If you do not have access yet, we would be pleased to establish your access.

Via WebCenter

The "Upload" folder in the WebCenter allows you to upload zipped or unzipped data to our server. If you do not have access yet, we would be pleased to establish your access.

■ Via e-mail

In this case, the max. data volume of 5 MB must not be exceeded.

Media

CD / DVD

File names and data structure

■ The name of the data folder must include the object reference and the data folder should be set up in a logical folder structure. File, image and folder names must be clearly identifiable. The entire data should be uploaded/delivered as a zip archive.



Data transfer formats

PDF/X: The ISO standard for prepress

The widely used PDF (Portable Document Format) file format makes it possible to exchange data across all platforms and has established its position in digital prepress.

This offers a major opportunity to optimize the workflow, although the versatility and the wide range of applications of this file format are associated with substantial risks which finally render the file unusable for print production. Images in RGB format or with low resolution are perfectly suitable for use on the Internet or for Office applications, but in now way satisfy the prepress quality requirements. Typefaces which are not embedded in the PDF are not represented correctly or are even completely replaced by other fonts. In addition to high-resolution images and embedded typefaces, a qualified PDF also requires feasible information regarding special colors, trapping and much more.

Owing to the need for prescribed criteria for a uniform standard, the ISO commission has created a standard called PDF/X defining the requirements regarding data transfer.

PDF

For print-ready data, we generally prefer the PDF/X1a format (PDF version 1.3). The tool (punching die) provided by us must be set to special color and for overprinting. This dataset cannot be edited and, therefore, the typefaces should be embedded completely. When generating the PDF, make sure to incorporate the FOGRA 39 L (current standard for the output).

When delivering data, PDF version 1.6 (PDF/X4), with transparencies and layers, the punching die must be set on a separate layer and protection of the generated transparencies according to the latest FFI standard must be ensured. If the PDF has several layers, they must be uniquely named. Please note that this data deployment method does not permit extensive changes to the contents.

Delivery of open-format data

We use Adobe Creative Suite for editing open-format data. The use of other current programs of the printing industry must be consulted in advance with us.

In case of print-ready open-format data, the fine-grain data, imported image data as well as the typefaces must be embedded completely or collected in separate folders (directories) which must be marked accordingly.



What has to be observed with open-format data?

- Inform us about the program name and the program version with which the data was created. We recommend using a text document attached to the documents.
- When converting or saving the data to another, e.g. earlier, version, this needs to be noted separately. However, we recommend you to create the data only in one program version, since this is the only way to guarantee correct data transfer.
- Send us the fine-grain data (images, logos) as well as typefaces used. The legal situation should be considered before transferring data.
- Delete all unused files/layers and document colors.
- A binding PDF must be attached to the dataset.

What about transparencies?

Transparencies, lens function and other effects generated by non-postscript-compatible program functions often lead to unintended results as effects still cannot be interpreted correctly by any PostScript Level 3 RIP. We strongly advise you not to generate a PDF as this does not improve or eliminate this incorrect interpretation.

Nature of the data

Image data

Vector data (line art originals) should have a minimum resolution of 1,200 dpi.

Halftone templates on a screen with 70 lpi in a 1:1 scale require a resolution of 300 dpi. In case of finer screen width or second-generation FM, please ask for (possibly scene-dependent) resolutions. However, the indicated value of 300 dpi is generally sufficient for image data and the value of 1200 dpi is sufficient for line drawings.

To avoid blurring or moiré effects, we recommend scaling the image data as follows:

Magnifications: Max. 180 % of the original size. Reductions: Max. 60 % of the original size.

Image formats

Images must be created as high-resolution: EPS, TIFF, PSD (with uniquely named and assigned layers).

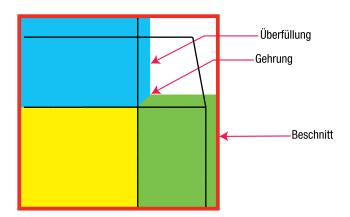


Bleed/gluing surfaces

Pixels in bleed size must always be laid out with trapping. This depends on the material/finished product used. For a simple flute we need 5 mm bleed margin and 10 mm for double flutes and displays. With regard to industry-typical production tolerances, we recommend using 3 mm trapping for dust and tuck-in flaps.

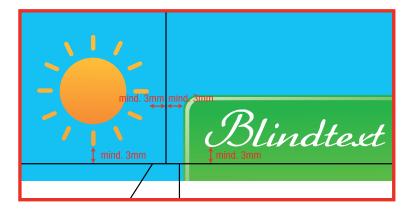
If, in case of adjoining flaps, differently colored screen motifs or colored areas make contact with one another, these must be connected in a miter joint. Trapping of the visible flap and the invisible flap in closed condition must be laid out with 45°. This makes it possible to compensate any dimensional changes of the print substrate.

The gluing surfaces must be free of paint and lacquer.



Padding between graphical elements and cutting and scoring lines

Texts, logos, illustrations, codes, etc. should be laid out such that there is a min. padding of 3 mm to the scoring or cutting line. This will prevent them from not being cut due to dimensional changes occurring during further processing (laminating) and cutting tolerances. This will also prevent a typeface from running over to the scoring line.



Trapping

To avoid white areas between different adjoining colored areas, these must be laid out with slight overlapping. We recommend using a value between 0.07 and 0.1 mm. However, please not that this is an average value which needs to be adapted depending on the layout and the print substrate. When delivering separated print-ready files, the trapping must have already been set by the data provider.



Total ink coverage

The area coverage must not exceed 280 %. If the coverage exceeds 280%, transformation (UCR) may be required, thus causing additional effort and costs which will be invoiced separately.

Colors

Delete all colors you do not need from the document. Colors must be uniquely named. Make sure to always specify the LAB or CMYK values for "corporate colors" in a separate text document.

Color coding

The number of colors to be printed must be specified and indicated in the color legend. The colors to be achieved must be identified as Pantone, HKS or "corporate color". If a special color is set up as four-color separation, it must be checked whether the desired hue can be achieved.

Black surfaces

For multicolor printing (4c), black solid areas should be overprinted with a screen value of 40 % cyan. For multi-color print (4c), black full-tone surfaces should be underlayed with 40% cyan, thus producing an increased depth effect of the black color.

Line thickness

Positive lines must have a thickness of 0.085 mm.

Negative lines should be laid out with one color only and with a minimum thickness of 0.15 mm.

Typefaces

All typefaces must be provided with the complete PostScript character set. Before transferring typefaces, the legal situation should be considered.

Always use real "font styles" as font styles generated artificially by programs cannot be fully transferred. Black texts may not be underlayed with chromatic colors as 4c. For small typefaces on bright background, we recommend you not to omit but to overprint them.

Type sizes

For technical aspects of the printing process and reasons of readability, the type size should not be below 5 points. The type size of negative typefaces is reduced. Therefore, we recommend selecting a minimum size of 7 points. No negative typeface should be used for multicolor objects.



Punch outline

Only the binding digital punch outline in a 1:1 scale may be used for setting up the print template. The punch outline must be laid out in the file on a separate edit layer and named as such. The outline must be set as full-tone color and must be assigned to the "Overprinting" object attribute.

Color space

All elements must be set as CMYK or special color (no RGB data).

Color profile (target profiles)

Process colors must be defined in the templates according to the FOGRA 39 L standard (current output standard).



EAN/matrix code

Matrix and EAN codes must obligatorily be used in the print data. With print-ready data, the data producer is responsible for potential post-processing, e.g. in case of illegible codes.

Basically, the GS1 guidelines must be observed.

If the code is highlighted in color for design reasons, you must check in advance whether readability is guaranteed.

Braille printing

The "Braille" typeface should be used for braille printing. This must be set on a separate layer as full-tone color with the designation "Braille".

Finishing

For additional finishing such as spot varnish, hot foil embossing, etc., additional colors and the corresponding designation of the finishing type must be set.

Color-compliant proofs

Generally, a color-compliant proof must be provided by the customer. Such a proof can also be provided by the company Wellprint at extra cost.

The following test prints can be used for adapting process colors:

- Proof print on print run material
- Digital proof with simulation of the print run material

Make sure that the proof print is created according to ISO 12647-5 and contains an evaluation of the achieved color/hue values.

The UGRA FOGRA Media Wedge (v2 or higher) must be incorporated in the proof. You must perform evaluation according to ISO 12647-5 and attach a label showing the measured values. If no evaluation is attached to the proof, we reserve the right to create a reference proof, which we will match with your data. The costs incurred will be invoiced as additional service.

Please keep in mind that a proof is only a simulation. The print substrate and the printing process can only be simulated which, in some cases, may lead to deviations.

For supplied color references which do not contain any analyzable measurement fields or which have been produced in another printing process (different from offset printing), the company Wellprint reserves the right to create a proof. This is the only way to determine/check reproducibility. The costs incurred will be invoiced as additional service.

Special colors of a standardized color system such as HKS or Pantone are matched by us according to the corresponding color boxes. Since colors are transparent in offset printing, the intrinsic coloring of the material used has an effect on the later result, which may lead to deviations.



Print colors/color systems

To guarantee precise colors in the production chain, standardized color systems such as Pantone, HKS or Euroskala (according to ISO 2846) must be used exclusively. Deviations are only allowed for special corporate/brand colors. If desired, please ask for details.

Additional costs for reproduction services

With regard to data which is not ready for printing or incomplete data, we reserve the right to invoice the expenditure for data post-processing, corrections by the author and changes to the print image. We will inform you in advance about the approximate effort and the resulting costs. Please note that the actual amount invoiced may differ from the previously indicated amount. The same applies to modifications of supplied data which deviates from the approval.

Output of print data

The output of print data will be invoiced.



Checkliste

Datenempfänger	
Datenlieferant Ansprechpartner Telefon E-Mail	
Objekt / Auftragsbezeichnung	Verwendete Farben:
Bezeichnung Artikel-Nr Strichcode-Art Größe: Code Stanzkontur	Haus-/Markenfarbe
Datenqualität	Veredelung:
Reprofähige Daten Druckfähige Daten	Farbverbindliche Vorlage tögg
Betriebssystem Mac/Version Windows/Version	Muster als Vorlage Andruck auf Originalmaterial Digitalproof Vorauftrag, Artikel/ Bezeichnung
Daten / Übertragung Version Anzahl	Text-/ Standverbindlichkeit the the total text to the
PDF/X-1a PDF/X-3 Programmdateien Version Anzahl Freehand Illustrator	Ausdruck PDF Sonstiges Textdatei (Dateiname:
InDesign Photoshop QuarkXPress ArtPro Coreldraw Sonstige	Bilder Eingebundene Bilder: Grobdaten Feindaten
Prüfbericht: vorhanden digital Ausdruck Schriften Eingebettet PostScript-Fonts Beigefügt vektorisiert	Übertragung / Anlieferung ☐ FTP-Upload ☐ FTP-Download (FTP-Serveradresse:) ☐ E-Mail vom ☐ DVD / CD-ROM
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