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Guidelines on gravure printing data delivery

Information about data delivery guidelines

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In order to ensure a reliable, seamless production process, we should like to inform you about a number of essential, mandatory offset printing CTP production requirements on the following pages. These apply in addition to the relevant delivery and payment terms of each printing company.

You can obtain the current version of these guidelines from the *Service* section of our website.

You will also find preconfigurations for the export of PDF files from Adobe InDesign here, which you can use to produce your print data.

Data Delivery Contact

Production Control Print Data Production

Phone: +49 (0) 351 8545-411

fst.dresden@prinovis.com

Overview of key points

Below is a brief summary of the key points detailed in the data delivery guidelines. A detailed, extensive summary can be found on the subsequent pages.

Print production parameters

Production test	Necessary to ensure an error-free process
Data delivery	Via a printing company platform
Delivery of proofs	See: <i>Delivery of proofs</i> on page 5
Dateibenennung	<ul style="list-style-type: none"> ■ In the following format: Version_NumberofPages_Product_Customer.pdf ■ Corrected pages with _cor and version number in ascending order (_cor1, _cor2 etc.) ■ A reference list is required if a work page folio is used
Technical specifications	<ul style="list-style-type: none"> ■ Initial printing dot values are set at a 5% halftone value ■ Technical colour shades and backgrounds at least 7% per colour channel
Production using black separation versioning	<ul style="list-style-type: none"> ■ One four-colour (CMYK) file with all non-changing elements per page ■ One unicolour file with all changing elements per page and version <p>See: <i>Version and language changes in black</i> on page 7</p>

Document properties of delivered files

Data format	<p>One-page PDF files complying with the PDF/X-1a:2001 standard.</p> <p>If this is not possible, the following criteria in particular must be met:</p> <ul style="list-style-type: none"> ■ Individual PDF pages. Where unicolour production is involved, a multipage PDF featuring the entire content ■ CMYK colour space as well as special colours by agreement ■ The correct colour profile has been used ■ No transparencies ■ Fonts are embedded ■ Trim box corresponds to net sheet size ■ Elements in 100% black set to <i>Overprint</i> ■ White elements set to <i>knock out</i> ■ Halftone images: minimum resolution of 300 dpi ■ Line images: minimum resolution of 1200 dpi
Bleed	3 mm
Minimum font size	7 pt
Minimum line width	0.2 mm positive, 0.25 mm negative
Back-end margin	5 mm at the transition between cover and inner section, 3 mm in the inner section

Print production parameters

Print data test

We conduct a print data test prior to the start of production. To enable us to do this, please send us **several representative pages** no later than ten days prior to the start of production. We use the test data as a reference for the production data supplied. We use this data solely for the purposes of testing technical feasibility. We will report our findings back to you. Should there be any divergences from the requirements defined in these guidelines, these need to be rectified for production data purposes.

Data delivery

We make a portal available to enable you to transmit your print data. Please contact us in good time when you are ready to do so. You are responsible for ensuring your print data is transmitted on time without errors.

File naming

Delivered files must be named according to the following model:

Version_NumberofPages_Product_Customer.pdf

So, for example en_0005_SampleProduct_SampleCustomer.pdf. The version descriptions must be identical to the details that you agreed with the printing company prior to data delivery. The number of pages must have a four-digit structure. File names must not include any special characters or spaces.

Any subsequent **corrected pages** must be marked with **_cor and a consecutive number** (e.g.: *en_0005_SampleProduct_SampleCustomer_cor1.pdf*, *en_0005_SampleProduct_SampleCustomer_cor2.pdf* etc.). This is the only way to ensure that the pages are correctly classified – even in the archive.

If you use work page folios, we require a reference list for the sequence of pages in the final print product. This must match the print sheet schedule and must be provided no later than delivery of initial production data.

Delivery of proofs

A colour-consistent proof provided by you must meet the following requirements:

The proof has been produced in accordance with the currently valid **DIN-ISO 12647-2** norm for standardised offset printing. The **correct ICC profile** corresponding to the type of paper used for the end product is utilised to produce the proof. The proof profile and the data profile match. The proof has been produced using the same data stock that will be provided to the printing company for print production purposes. The following information must also be noted on a delivered proof:

- File name of the proofed file
- Type of proof equipment used
- Proof profile used
- Date and time of proof production
- Date and time of most recent calibration of proof equipment
- Control strips in the form of the current original-sized Ugra/Fogra media

wedge The proof is tested using the *control strip verification* process. The result must be noted on the proof (for example, using an adhesive label or overprint). The tolerance specifications of the relevant DIN-ISO 12647-7 apply.

Mixed usage of soft proofs (approval on a colour-consistent monitor) and delivered hard proofs is not permitted.

The classification corresponds to the valid DIN ISO 12647-2 standard. The ICC profiles of paper types can be downloaded from the following website: <http://www.eci.org>

Soft-proof handling

If you have opted for print processing involving soft proofs, the production run will be colour-harmonised using Prinovis' soft proof system only.

- The correct lighting environment (ISO 3664:2009) and a calibrated wide-gamut soft proof monitor (ISO 12646) must be used to assess the colour consistency of the pages.
- The consistency assessment is always undertaken using the page data and the ICC profiles of Prinovis' soft proof system. On request, the customer and – if required – their repro studio can obtain their own customer access.
- The benchmark for the accurate application of PDF data is Adobe RIP reference output.

Change of version and language in black

To produce versions only involving black separation changes, the cyan, magenta and yellow data of the basic version is combined with the black data of each change version.

To action this, we require a 4C composite file including all non-changing elements per page as our basis. A file including all changing elements is also required for each page version. This file must meet the following requirements

- All changing elements must be coloured black, set to *Overprint* and must not include any transparencies.
- Coloured or negative elements may not change.

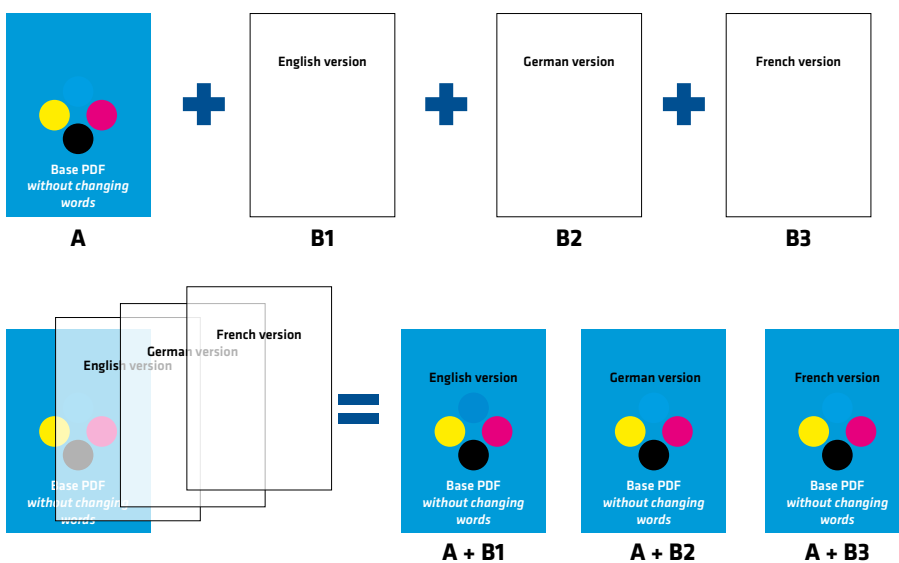
The change of language/version must be clearly identifiable from the file name.

The only file name variable of any change version is the number of pages.

Example:

DE_0144_SummerCatalogue_SampleCustomer.pdf

EN_0144_SummerCatalogue_SampleCustomer.pdf



Combination of 4c original version with purely black change versions

Document properties of delivered files

Data format

Our workflow is based on **single PDF pages**. Ideally, you supply us with one document for each page. Where purely unicolour productions are involved, please supply one multipage PDF file, including all content pages, for each version.

To meet these requirements, we expect you to utilise the

PDF/X-1a:2001 standard as well as **PDF Version 1.3**.

If you are unable to deliver in the PDF/X-1a:2001 data format, then the following criteria in particular must be met:

- The file only contains **CMYK** elements. Special colours may be used if agreed beforehand
- All contents are included in the correct colour profile in accordance with the valid ISO 12647-2 norm. See Paper Classification in the *Delivery of proofs* section on page 5
- There are **no transparencies** included
- All fonts used are embedded
- The pages include a trim box in the same position as – and of an identical size to – the final trimmed format
- If not otherwise requested from a design point of view, elements that are coloured 100% black are set to *Overprint*
- White elements set to *Knock out*
- Halftone images have a resolution of at least 300 dpi
- Line artwork has a resolution of at least 1200 dpi
- Any trim marks must be included at a margin of at least 3 mm to the net sheet size.

Bleed

We require no less than **3 mm bleed** on all four sides. Relevant information must be placed at least 3 mm from the edge of the page on all four sides.

Minimum font size

The minimum reproducible **font size is 7 pt**.

Minimum line width

The minimum positive line width is **0.2 mm**, the minimum negative line width is **0.25 mm when a solid colour is used**.

Image creation

- The colour composition is determined by the colour profile used. The maximum dot area is 360%. The correct colour profile should be agreed with the printing site prior to page creation.
- Please avoid a strong UCR or GCR composition as this can lead to a different result on press than the colour simulation on your proof.
- Exceptions to the above are images with fine patterns with the risk of Moiré and/or colour drift on the printed copy (e.g. herringbone and glencheck patterns or black type used in images e.g. on packaging items). Please reduced the colour content on the separations and increase black.
- Danger of Moiré (Moiré = unwanted visible patterns caused by Screenclash) exists for:
 - Image details with delicate structures
 - Too high sharpness in details
 - Images that are not scaled to 100% final size
 - Images with a resolution different to the output resolution
 - Multiple scaling of sharpened data in the reproduction process

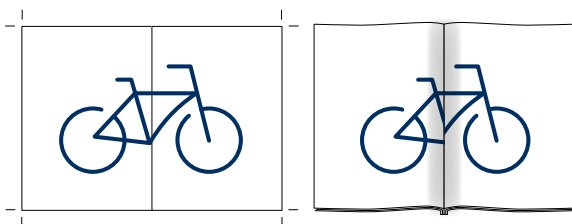
It is not always possible to simulate Moiré. Even a proof might show different results, as the proof printing process deviates from the final printing process (RIP-Software, output resolution, ink transfer mechanisms e.g. inkjet)

Due to the complex and unpredictable interactions that can lead to Moiré, we will not take responsibility for its appearance on the printed copy!

Back-end margin

In the case of a perfect-bound brochure, the cover is glued on both sides of the inner margin with a thin line of adhesive. That is why an area of approx. **5 mm** is not visible at the inner margin. To ensure seamless image transition of motifs that extend across the inside front cover and the first content page, the motifs must be shifted 5 mm out of the inner margin on both layout sides.

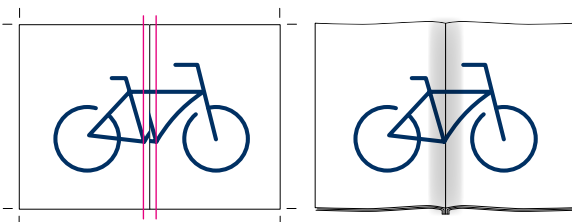
A double-page motif on inside pages must also be adjusted, as an inner margin area would be concealed by the binding on both pages of the perfect-bound end product. Here we recommend shifting the motifs roughly **3 mm** away from the inner margin on each page.



Visibility of graphics that extend across the inner margin of a perfect-bound product.

The left-hand images show the layout programme view in each case, with the finished product view on the right.

without back-end margin



with back-end margin

Repro recommendations for matt papers

Matt papers have certain characteristics as far as printability is concerned.

Given the very coarse nature of their surfaces, these papers tend to feature ink wetting problems. That is why the following data structure issues need to be borne in mind:

- Dot values of <5% in all colours are not permitted.
- Purely black structured backgrounds of <50% halftone value are problematic and should be avoided if possible. A grey shade, if nevertheless required, should then be structured with a high colour proportion and secondary black proportion. It would make sense to set the chromatic colours at least twice as high as the halftone values in black (e.g. C 28%, M 25%, Y 26%, K 10%)