



Guidelines for supply of final digital pages for rotogravure printing

General instructions

Following guidelines are the basis for the supply of digital data and print references for rotogravure printing. If not observed this can lead to unpredictable issues when producing your job.

Please check and approve the data before supply it to us. In terms of content, we process the data exactly as supplied to us. If you need to make any corrections, please contact your repro studio to apply them. This ensures that you hold a copy of the final amendment. Please consider that resupplied pages, caused by any late amendments, incur additional effort (cost, time) as they have to pass through the whole processing workflow again.

We print according to ISO 12647-4 in the Process Standard Rotogravure. The supplied data as well as the proofs should be produced accordingly. You will achieve the best results if you supply data and proofs in the European Rotogravure Standard Version 2 (PSR V2).

Responsibility

TSB as your printer can only guarantee a flawless production process on the basis of the supplied digital data, provided it has been produced according to our specifications. The client is responsible for the correct presentation of the digital data.

Basically we recommend a test with printing data and proofs to agree your technical process and verify the suitability of the supplied pages and print references.

Other topics

For advice or further information please contact our Sales or Account Management. They will pass you on to a competent contact in the relevant technical department for more specific enquiries.

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1.0 Comments for reproduction

Please refer to the following specifications for the technical reproduction process for supply of final digital pages. If not observed, there will be no guarantee of a flawless print reproduction of your data.

1.1 Technical framework

1.1.1 General

The TSB colour space is adapted to the colour space of the Process Standard Rotogravure of the European Color Initiative (ECI) PSR V2.

The data must be create in the correct CMYK colour space.

Spot colour datas as well as in RGB or Lab created, will not be processed. If you have supplied RGB content and we are forced to process it due to the time schedule, TSB will not take responsibility for the colour reproduction of your product.

1.1.2 Images

- > For color and grayscale an image resolution of 300 dpi applies, for line images/bitmap 1200 dpi.
- > The maximum dot area for the four printing colours is 360%.
The correct colour profile should be agreed with TSB corresponding to your job.
- > 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 printing copy. Please reduce the colour content on the separations and increase black.
- > Based on complex interactions a Moiré is still not predictable and evitable.
In such a case TSB will take no responsibility.
- > The first printing tone values are around 5% per colour channel. Multicoloured technical elements respectively fonts and colour panels should have at least 7% per channel, single-coloured at least 10%.

To avoid the appereance of gaps due to register varience, we recommend trapping to abutting coloured objects applied as necessary.

1.1.3 Data formats and Color profiles

Data formats: PDF/X-1a:2001 (ISO 15930-1), PDF 1.3 (Acrobat 4.0 compatible) unseparated
 PDF/X-1a:2003 (ISO 15930-4), PDF 1.4 (Acrobat 4.0 compatible) unseparated
 PDF/X3:2002 (ISO 15930-3), PDF 1.3 (Acrobat 4.0 compatible) unseparated
 PDF/X3:2003 (ISO 15930-6), PDF 1.4 (Acrobat 4.0 compatible) unseparated
 PDF/X4 (ISO 15930-7), PDF 1.6 (Acrobat 4.0 compatible) unseparated

ICC-Color profiles: PSRgravureMF.icc
(PSR V2) PSR_SC_STD_V2_PT.icc
 PSR_SC_PLUS_V2_PT.icc
 PSR_LWC_STD_V2_PT.icc
 PSR_LWC_PLUS_V2_M1.icc

ICC-Color profiles: PSR_MF_V2_M1.icc
(PSR V2 M1 2020) PSR_SC_STD_V2_M1.icc
 PSR_SC_PLUS_V2_M1.icc
 PSR_LWC_STD_V2_M1.icc
 PSR_LWC_PLUS_V2_M1_v2.icc

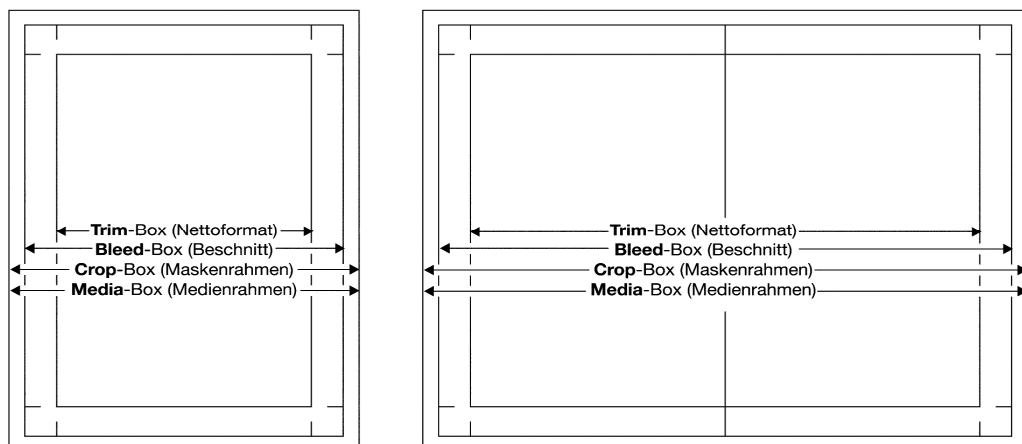
(Download: www.eci.org/de/downloads)

1.1.4 Fonts/Typefaces

- > Black text should be defined only as 100% black and overprint.
- > On change versions, such as language change in black, elements may only be changed in the relevant separation.
- > The selection of fonts must be adapted to the process rotogravure:
 - > no fonts with serifs
 - > no extremely thin or fine fonts
 - > Positive text min. 0,20 mm line width
 - > Negative text min. 0,25 mm line width
 - > Convert fonts to path or generally embed in file

1.1.5 Page setup

- > The data can be delivered as single and double pages, mixed will be accepted.
- > PDFs as multi page documents will not be accepted.
- > All pages of one job must have the same geometric definitions.
- > All pages of one job must be centred in the file.
 - > Trimm-Box = net format
 - > Bleed-Box = gross format
We recommend a trim of min. 3 mm constant on each side.
 - > Crop-Box and Media-Box should be equal, if possible also the gross format.



- > Trim marks must be created outside of the net format;
each 100% in CMYK; length min. 3 mm; thickness 0,2 mm.
- > Important visual elements should be placed inwards at least 5 mm from the trim.
- > Text that runs over the collar should be spaced depending on the relevant finishing process.

> Bund doubling

In the case of adhesive-bound products, it may be useful that in the case of double-sided motifs, which run through the middle of the booklet, a waistband addition is already taken into account in the layout. This waistband addition compensates for the loss of motif caused by the clamping effect of the enclosed envelope occurs. By doubling the bund, it can thus be largely ensured are achieved that harmonious image transitions and good readability are achieved in the middle of the booklet become.

A fret doubling must be taken into account in the original layout and can no longer take place during data processing in the print shop. The width of the doubling depends on the impact behavior of the product. Often lead 4 mm per page to a good result.

> Fret offset / Displacement / Expulsion

In the case of extensive products in saddle stitching, the sprouting of the printed sheets is unavoidable when processing from the outside to the inside. The sides of the inner arch are trimmed smaller than created. Compensation is provided automatically during of data processing in the production of printing forms (staple thickness compensation). Nevertheless, the positioning of the pagina and the positioning should be more important. Page components should be taken into account.

> Bonding

In the case of an adhesive binding, the inner sides of the envelope are stored on the first and last side of the content glued back to approx. 5 mm due to production. Especially in the case of overflowing motifs between cover and content, this bonding is already in the page structure to be taken into account. Please plan 3 mm white space and 2 mm motif doubling in the waistband per page, otherwise a shift and/or loss of important page components must be accepted.

1.1.6 File naming convention

A fixed file naming convention for the supplied datas will be recommended.
For an automated flawless data handling in the prepress a consistent naming with following informations will be essential:

- > Job identification
- > Issue number
- > Paging with leading zeros and fixed positions in the file name
- > Identification of double or single page
- > Identification of language or region version
- > Correction version

For each version change, please supply all pages of the version.

The usage of special types, blanks or symbols in the file name is not permitted.
Alphanumeric types and underline will be accepted:

- > **_abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789**

Example:

Double page	XYZ_HH_D002003XX.pdf
Single page	XYZ_HH_E0002XX.pdf
Correction version	XYZ_HH_D0020003XX_K01.pdf

Explanation:

- XYZ > Job/order
- HH > Issue number
- D/E > **D**ouble or **S**ingle page (single = German: **E**inzel)
- 002 > Paging left hand
- 003 > Paging right hand
- XX > Language or Region version
- K01 > Correction version

2.0 Supply of data and print references

The employer will supply imprinted (print free) final pages at the printers. Based on data security no open data formats such as QuarkXPress, InDesign or similar will be not accepted.

Please note, subsequent supplied pages caused by correction will be generate an additional effort. These pages has to pass again the whole processing workflow in the data handling.

The naming convention of the printing documents must be clear defined (refer paragraph 1.1.6). The data supply takes place by FTP. Login data will be provided by the customer service.

The delivery of the data by e-mail is for reasons of processing and data security inadmissible.

Data archiving is not provided.

3.0 Control documents

Hardcopy proof handling

For each delivered final page and version is a verified colour proof without corrections respectively only for content changes a valid laser copy to supply.

The delivered proofs must created from the supplied data of the final pages!

Are the valid proofs at the point of time of engraving not available, the data will be taken as reference themselves according to the general conditions of softproof handling.

Are differences in the content between the delivered data and delivered proof, the data will be taken as the reference.

Softproof handling

The handling of the print job via softproof take place without any paper references. Only the supplied data will be taken as the reference. The processing take place according paragraph 2.0 and paragraph 5.0 of the TSB guidelines for supply of final pages for rotogravure printing.

4.0 General conditions for hardcopy proof handling

The supplied digital colour proof, produced according to ISO 12647-7, is the control medium for handling of your print job. It should be used the colour profiles recommended by us, preferably the profiles of manufacturers of the proof systems.

The digital proof, rendered by the supplied data, should be contains following control elements:

- > file name
- > type of proofer
- > proof parameters with checksum
- > date and time of last proofer calibration
- > Ugra/Fogra media wedge

The assessment takes place to the conditions according ISO 3664:2009:

- > Light type 5000 Kelvin
- > Overview 2000 Lux

The delivered digital proofs must be checked by the supplier towards the tolerance specifications of ISO 12647-7 through verification of the media wedge by a sticker or imprint.

- > Reference:

Proofer:	Epson Surecolor SC-P 5000
Software:	GMG ColorProof Version 5.13.1.187
Proofpaper:	Select Media Proof 250 Premium Plus Satin
Calibrationset:	GMG Driver - 10c - Photo Black - 720 x 1440 dpi - Bidir - V1

5.0 General conditions for softproof handling

In the case of order processing via soft proof, the colour matching is carried out by Fogra certified Soft proofing stations in conformity for the lighting environment of the ISO 3664:2009 standard and a calibrated wide-gamut monitor of iso 12646 standardization.

Following terms must be observe to receive a perfect printing result:

- > The colorproof assessment of the printing data at the printers and at the customer conforms to the ISO-standards 3664:2009 and 12646.
- > The supplied printing data conforms to a relevant valid rotogravure standard 'PSR V2', or to a colour profile in agreement with TSB.
- > The colorproof assessment at the printers will always undertake by the supplied original data and the ICC-profiles of the softproof systems.
- > The warranty for the correct implementation of the supplied data in PDF-format must be conform to the Adobe standard definition.
- > The mixed handling of hard copy and softproof is not permitted.

For more informations of the issue of softproof, please contact our technical department quality control prepress and print (see page 2 of the guidelines).

6.0 Tolerances

A production in rotogravure printing, particularly on large format printing machines, differences of the register could not always be eliminate.

Therefore is for an expected quality a maximum difference of tollerance to determine.

Under a tolerance of +/- 0,1 mm will be understood a spread of 0,2 mm.

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