

REQUIREMENTS FOR DIGITAL DATA PROCESSING FOR OFFSET PRINT

NEOGRAFIA, a.s. is processing print according to the international press standards FOGRA ISO 12647-2: 2004 and 2013 – Graphic technology - Process control for the production of half-tone colour separations, proof and production prints. Offset lithographic processes.

The data should be processed exclusively by means of professional software designed for it. We prefer the data processed by means of packet Adobe Creative Suite (containing Adobe PhotoShop, Adobe Illustrator, Adobe InDesign, Adobe Acrobat, Adobe Distiller), eventually made-up by means of Quark XPress. As unsuitable we deem the data processed in any office packet (e.g. Microsoft Office - Excel, Word, PowerPoint), but unsuitable are e.g. also files .cdr elaborated by the program CorelDraw.

DATA INPUTS

1. through Internet:
 - a) InSite server of Neografia at the address <https://insite.neografia.sk>
 - preferred method to present data through web
 - accessible through www browser (access username and password on request)
 - InSite server enables except file sending and downloading for the print also the WebProof (interactive proof), commenting and approving of RIP-ped pages directly from www browser (or also the on-line discussion of all parties concerned in common viewing the elaborated data – even from various world countries at the same time)
 - b) FTP server of Neografia at the address <ftp://neografia.sk>
 - we will create the client's username and password on request
 - general access account: Username: neorepro, Password: neorepro FTP-client: Transmit, Fetch or Internet Explorer, click on: <ftp://neorepro:neorepro@ftp.neografia.sk/>
 - c) in urgent cases – the proof-sheet of the client without access to InSite, files with small data size (max. 2 MB) through e-mail to: repro@neografia.sk
2. on data carriers: CD-R/RW, DVD-R/RW, USB key, USB disc, FireWire Disc
 - other media are allowed only after communication with the prepress-department

The data are necessary to be supported by dummy or mirror. The list of supplied mediums, dummies and coloured designs should be included in the acceptance protocol with data entering or in the accompanying letter to the order. Any change or correction of supplied data shall be confirmed with e-mail or fax (InSite server automatically generates and sends an e-mail). E-mail or fax must include the list of supplied new pages. The name of new pages must contain the word "new".

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FORMATS OF SUPPLIED DATA

The obligatory print file format is the PDF format: PDF/X-1a:2001 and PDF/X-3:2002 - ver. 1.3 and 1.4. Versions 1.5, 1.6 and 1.7 may not be proceeded correctly (some effects may be missing). PDF file must be a composite one (not separated). PDF/X-4:2010 format is supported with the condition, that all layers and opacity are marged down. Neografia guarantees the compliance of final printouts with the input PDF documents only if the supplied files conformed with the standard PDF/X-1a and PDF/X-3 (otherwise the client's imprimatur is necessary and decisive).

In individuall cases and it it is agreed so, print data can be supplied in other formats, these are preferably the open documents from applications like: Adobe InDesign, Adobe Illustrator (ATTENTION! All used figures and fonts must be also supplied together with the files).

FILES FOR MULTI- -LANGUAGE VERSIONS

To create the multi-language mutations we prefer supplying 4-colour PDF files for each mutation, which include CMYK, as well as the text in the black plate (or CMYK + text as 5th direct colour), but it is also possible to supply the separated PDF files with graphic common for all mutations (CMYK base) and in separated PDF files the black texts, or the specific graphic of individual mutations (Text Black).

It is necessary to observe that all language mutations have the same parameters in size and location of pages and trimboxes, make-up of texts and figures. In postscript proceed in compliance with the basic document.

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DATA FOR PARTIAL VARNISH or DRIP-OFF VARNISH

Data for partial varnishing of a product must be included in a separate PDF file processed in one colour (100 % black), for varnishing by UV varnish they should be positive (what should be highlighted by a glossy varnish, it should be black), for varnishing by so called Drip-off effect it should be negative (what should be highlighted by a glossy varnish, it should be white in a document, the rest is black).

PDF document for separation of partial varnish must include the vector graphics, in case of bitmap figure this should have resolution of min. 1200 dpi.

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CONTENT OF PDF DOCUMENT

- all document objects must be processed in colour space CMYK (or CMYK + direct colours), however, it must contain just those separations to be used for print
- PDF file must contain all font types used (setting: All Fonts Embedded)
- the optimum resolution of illustrations is 300 dpi for bitmap figures and 1200 dpi for pen-and-ink drawings in case of standard (AM) raster, and 600 dpi for bitmaps in case of frequency modulated (FM) raster
- the total sum for colour scheme values of CMYK (Total Ink Limit) should not exceed 300 %
- the black texts must not be created from various colour palettes, but only as 100 % black one; consequently we recommend to apply an overprint function onto them, which ensures that beneath the text there will be no selected space in the bottom area (in case if the document object was created by scanning printed artwork, it is necessarily to set up the Black and White mode for scanning texts)
- in case of application of supplementary direct colours, these must be exactly defined according to Pantone collection of samples
- for bitmap figures, as well as for vector graphics, do not assign (or to switch it off) the ICC profiles, our RIP ignores them. The undesirable colour changes in document can occur by assigning the incorrect ICC profile
- the registration marks and matching marks must be indented by min. 3 mm from the net format
- the figures positioned on the fall must overlap by their drawing the net format by min. 3 mm
- all texts and graphics (unless they are bleeds) should be offset from the trim lines by at least 3 mm, in case of end-papers by at least 5 mm
- the PDF document must exactly identify the net format of final product (so called trim box), its positioning in case of multi-page file must be the same on all document pages.

COLOURING OF DIGITAL DATA AND COLOR APPROVAL

NEOGRAFIA, a.s. complies with requirements and specifications of the International Standard ISO 12647-2 for commercial offset print and undertakes to realize any orders on its offset printing machines in terms of conditions specified by this standard.

Therefore, when processing the digital data for the print at the client's graphical study to separate the figures (to convert from RGB into CMYK) in the colour space:

FOGRA 40L	(PSO_SC_Paper_eci)	for SC paper	web offset
FOGRA 41L	(PSO_MFC_Paper_eci)	for MFC paper	web offset
FOGRA 45L	(PSO_LWC_Improved_eci)	for coated paper	web offset
FOGRA 51L	(PSO_Coated_v3)	for coated paper	web and sheet fed offset
FOGRA 52L	(PSO_Uncoated_v3)	for uncoated paper	sheet fed offset

The previous FOGRA recommendation profiles are still acceptable and can be used:

FOGRA 39L	(ISO_Coated_v2_eci)	for coated paper	sheet fed offset
FOGRA 47L	(PSO_Uncoated_eci)	for uncoated paper	sheet fed offset

Prior to alone export of file to postscript, or when distilling it to the format .pdf, however, do not connect the ICC curves (disable Color Management).

In case of surface treatment by lamination, to create the data for simulation of the final colourity, please apply these colour spaces:

FOGRA 49L	for print sheet coated by mat laminate
FOGRA 50L	for print sheet coated by gloss laminate.

However, these colour environments are to be used only for the preview of how the final product will look like after being coated by laminate. The profile responding to the colourity FOGRA 39L / FOGRA 51L for coated papers print by sheet fed offset will be assigned to the data prior to the print. If the customer will not indicate otherwise, data will be considered as with the colourity optimised for lamination. In case if the colourity is not optimised for lamination, customer can require NEOGRAFIA to optimise it.

It is necessarily to inform the printing house about the specific colour space which was used for data processing while sending data.

Due the same reason, it is necessary to supply to the print the colour patterns, which simulate the above mentioned standard colour spaces. As a colour pattern we accept exclusively the certified colour proofs, which contain the colour measurement scale FOGRA Media Wedge 3 (for eventual later verification of proof colourity). In case if the supplied colour reference is not in accordance to ISO 12647-2:2004 or 2013, it will be considered as nonstandard colour reference. In such case NEOGRAFIA will:

- print out a certified colour reference from the supplied data,
- verify and evaluate the conformity of the certified color reference and the one supplied by the customer,
- in case of nonconformity, NEOGRAFIA will recommend the customer to be present during the print for color approval,
- NEOGRAFIA will make all efforts to bring the colourity of offset print as close as possible to the supplied colour reference, however assumes no responsibility for possible resulting mismatch.

If the Customer requires the approval of print colour directly at the printing machine, the Customer is obliged to confirm the approval in writing. Print work in compliance with such approved colourity can not be subject of claim on the ground of colourity.

Color reference printout cannot be considered as relevant if it is already processed with the lamination foil.

RECOMMENDED RESOLUTIONS

Standard resolutions used for the offset platemaking are:

200 lpi, 250 lpi	coated papers	sheet fed offset
200 lpi	coated and LWC papers	web offset
150 lpi	uncoated papers	sheet fed offset
150 lpi	SC papers	web offset
150 lpi	uncoated papers	web offset

FILE NAME

- the file name can use only characters of English alphabet
- do not use the diacritical marks (hiccups, accents) nor punctuation (exclamation mark, question mark, semicolon, quotes, apostrophe, brackets...) except the break character and dash
- set the file name of max. 12 characters

GRAPHIC DISPLACEMENT IN SIGNATURES

Folding paper into signatures and binding it causes the natural effect of displacement between the graphics of the inner and the outer pages (push-up). It most visible in case of thicker, saddle-stitched products.

To eliminate this effect the printer by standard modifies the geometry of pages in the direction displacement. This lowers the risk of for example cutting off the page numbers.

In case the customer does not want this modification to be applied, it must be stated clearly in the product's technical specification.

The data needs to be adapted accordingly. In this case, we advise to offset the no-bleed graphics elements (including page numbers) inwards from the fore edge by 10 mm.

registration marks, matching marks,
guiding marks and colour strips must
be distant at least 3 mm from cutting



net format (trim box)

all texts and graphics
(unless they are bleeds)
should be offset from the
trim lines by at least 3 mm,
in case of end-papers
by at least 5 mm

the object for bleed must overlap
the net format of product by
min. 3 mm at cutting

