

Prepress guide

Offset production

Contents

1. Page material preparation

1.1 General guidelines	3
1.2 Colour specifications	4
1.3 Fonts	6
1.4 Use of images	6
1.5 Raw text	6
1.6 Proofs	6

2. Colour Management

2.1 ICC-profiles	7
2.2 Softproofing with a profile	7
2.3 Proofing with a profile	7
2.4 Profile conversion in image processing application	7
2.5 Profile conversion when exporting PDF	7
2.6 Profile conversion at Hansaprint	8
2.7 Profiles and print-ready PDFs	8
2.8 Color management in page layout application	8

3. Material delivery

3.1 Delivery in open format	9
3.2 Delivery in closed format	9
3.3 Version Changes	11

4. Material transfer

4.1 Line transfer	12
4.2 Supported media	12

5. Kodak InSite prepress portal

5.1. InSite workflow	12
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6. Ecolabels

6.1 Certified ecolabels	13
6.2 Rules when using ecolabels	13

7. Following of instructions and contact details

7.1 Material delivered contrary to instructions	13
7.2 Instruction updates	13
7.3 Hansaprint contacts	13
7.4 Hansaprint addresses	13

8. Downloads

8.1 Prepress instructions	14
8.2 PDF joboptions for InDesign	14
8.3 Color Settings	14
8.4 Hansaprint's ICC profiles	14
8.5 Page Exporter Utility script for InDesign	14
8.6 PDF preflight profile	14

PREPRESS GUIDE – AT YOUR SERVICE

Hansaprint is committed to developing the technical quality of printed material, flexible control of the production process, and safe and efficient telecommunications links with the customer.

The purpose of this Prepress Guide is to make the sending of your digital material to Hansaprint as safe and easy as possible.

Hansaprint's prepress unit performs professional, quality work. Hansaprint's graphic design team also offers its services. If you require further information we will do what we can to help. You can contact our experts in Turku or Vantaa, thus ensuring that you have all the information you need. Names, telephone numbers and e-mail addresses can be found from the section "7.3 Hansaprint contacts" on page 13. Please feel free, of course, to call your own contact person.

1. Page material preparation

The following guidelines will assist you when you are preparing page material. The more carefully you prepare the material before it is sent to press, the more time will be saved in the production stage. Unnecessary costs are not encountered and the end result fulfils its objectives.

1.1 General guidelines

1.1.1 Page size and trimming margins

The size of the publication has to be exactly the same as the final trimmed size of the product. Bleed should extend 5 mm over the trimming line. With page-size and smaller advertisements allow appropriate bleeds on all sides, because the place of an advertisement could be changed and you don't know whether it is on the left or the right side of the spread.

1.1.2 Avoid text cutting

You will avoid text cutting if you do not position text or other essential elements (e.g. logos) closer than 5 mm from the trimming line. With perfectbound products the effect of the spine has to be taken into account for headline text that crosses the double-page spread. In normal cases a 3 + 3 mm margin between letters is sufficient.

NOTE! With perfectbound products do not cross body text over the spread due to a poor readability.

With perfectbound products the effect of side glueing has to be taken into account with the inside covers and on the first and last pages of the contents. Side glueing reduces the usable page area by around 5 mm starting from the spine.

1.1.3 Machine-glued products

Within press ready-made glued products, the space needed for the glue spine must be paid attention. The glue spreads to the pages by approximately 2 mm from the back. If, e.g. the text continues over the spread, leave 3 + 3 mm between letters, when preparing a page layout.

1.1.4 Picture over the spread

With perfect bound and machine-glued finished products a part of a picture will be hidden due to glueing in product's back. Hansaprint do not pay attention to this in its imposition process. Therefore, if you want the picture shows without "break", you should move picture from back to outward on both pages of the spread. Our recommendation for perfect bound products is 3 mm per page (3+3) and with machine-glueing 2 mm (2+2).

NOTE! With perfectbound products the side glueing between the inside covers and on the first and last pages of the contents shortens the page 5 mm from the back. This means you must move a spread picture 5+5 mm.

To move pictures do as follows:


1. Move the picture to the right position on a spread.
2. Copy the picture box and place the copy to exactly same position.
3. The right-hand page of the spread: move the left edge of the upper picture box to the back of spread (otherwise the picture box remains its position). After that move the picture 3 mm to the right inside the picture box.
4. The left-hand page of the spread: move the right edge of the lower picture box to the back of spread. After that move the picture 3 mm to the left inside the picture box.

As a result you have two separate picture boxes, which both have same picture inside. In practice a 6 mm wide part of a picture will be printed twice, but visually the picture continues correct over the spread.

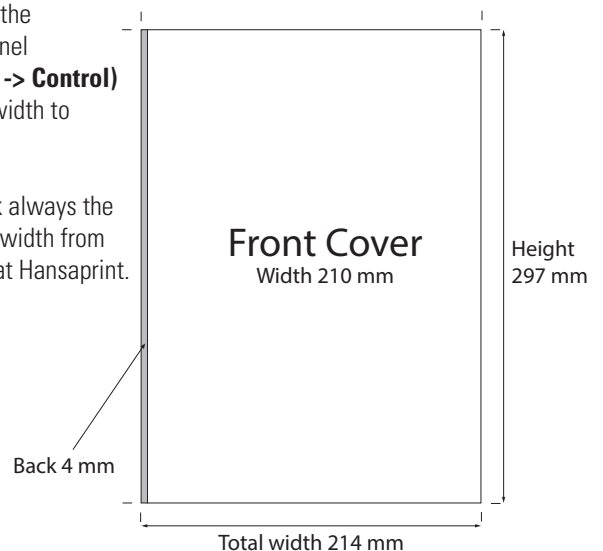
1.1.5 Spine of perfectbound product

In a perfectbound product combine the front cover and the spine area (back). In that case add the spine width to the width of the front page.

Example: In the following example the trimmed page width of the product is 210 mm and the spine width is 4 mm. To change the page width of the front cover to 214 mm in InDesign CC, do as follows:

1. in InDesign select the **Page Tool**  and then with the tool select the front page. If there is a master page for the front page, then select it. Make sure that the entire page is selected in the layout, not only in the Pages panel.
2. Specify in the Control panel (**Window -> Control**) the page width to 214 mm.

NOTE! Check always the correct spine width from your contact at Hansaprint.



1.1.6 Naming files

When the pages are in digital format, they are distinguished from each other on the basis of their file names. For the automated imposition process it is important, that the pages are put in to order according to the page numbers. The clearest way to name the pages is to start the name with 3-digit page number (001_, 002_, etc).

NOTE! For InDesign there is available a script called Page Exporter Utility. With the script you are able to export single page PDF files from the document with logical file names. You can download the script from [Hansaprint's website](#).

Naming instructions:

- use as short file name as possible. Maximum total length is 31 chars.
- in file names use only numbers 0-9 and letters a-z.
- Do not use spaces; replace them with underscore character (_). Do not use other special characters.
- use a file extension at the end of the name.
- use a period (.) only in front of a file extension.
- use the product name and its issue number in the file name.
- use the page number in the name.
- if a same file contains several pages, they must be consecutive in page number order and without empty pages.
- if the product contains language or other versions, always add the version to the name.
- examples of a good file name:
001_catalog8_ENG.pdf or 007_012_catalog8_ENG.pdf

1.1.7 Line thickness

Don't use "hairlines" when specifying the thickness of lines. The true thickness of hairlines varies depending on the software used and the printing resolution. Specify line thickness either in points or in millimetres. The smallest recommended line thickness is 0.25 points. We do not recommend the use of thin lines with half tones or many colours. The minimum thickness of negative lines is 1 point.

1.1.8 White text

Depending on the web width, paper weight, paper quality, etc. the web offset process might have dimensional changes in a paper. The dimensional changes of the paper can cause misspass in press. This problem appears especially clearly, when a small size, white text is used on a 4-colour image or an multicolour element. These problems are compensated at Hansaprint's prepress and press stages, but the best result will be reached, if you pay attention to the following recommendations when using white text on multicolour surface:

- Use at least 8 pt type size
- Use font type with even thickness (grotesk, sans serif)
- Use bold or heavy typefaces.

1.2 Colour specifications

1.2.1 4-colour production

In 4-colour production define all colours as process colours (CMYK). It is very important, that the final PDF file contains only elements with process colours.

If you have used spot colour definitions in a 4-colour job, check that also them have been changed to process colours.

So you can be sure, that elements and colours are reproduced correctly in the print. See more next paragraph.

1.2.2 Spot colour

In cover and sheetfed offset production it is possible to print a spot colour. Define the colour as a spot colour in layout software and prepare a PDF in same way as in normal CMYK production. Hansaprint's prepress system separates the spot colour as the fifth separation.

1.2.3 Transparent elements

In 4-colour jobs both transparent elements and with them overlapping elements, must be in the same colour space (CMYK), in order that the elements and colours reproduce right. Otherwise there will be an error on page, when transparencies are flattened. An error could appear e.g. as white background in the area, where the elements overlap each other. InDesign's "drop shadow" is an example of transparency.

Transparency flattening is a task, which must be performed before the plate output.

You can preview the elements that will be flattened with InDesign's "Flattener Preview" function. In Acrobat check the result with Output Preview -function.

1.2.4 Rich black

In order to achieve a strong deep black in bigger colour surfaces we recommend the use of

100 %	black (K),
50 %	cyan (C)
40 %	magenta (M)
40 %	yellow (Y)

NOTE! Avoid the use of small size white text with rich black, because of disturbing misregistration in a print. See more paragraph 1.1.8.

1.2.5 Trapping

Trapping is used to eliminate misregistration, which could be caused e.g. by the stretching of paper. When trapping the adjacent coloured objects slightly overlap each others. Due to overlapping a small misregistration does not show in print.

Use of trapping makes multicolour printing easier especially, when printing paper with poor dimension stability. Normally an uncoated, low grammage paper causes more misregistration.

Already in planning stage you can minimize easily showing misregistration problems by avoiding the use of small point size white text (negative text) on multicolour elements. If this kind of text is used through the product, the misregistration is obvious although trapping has been used. Check our recommendation for white text in paragraph "1.1.8 White text" on page 4.

Hansaprint uses trapping in its prepress process. Our workflow software traps according to given definitions and limit values. Notify, that all adjacent colours are not trapped, if their darkness or tone are near each other.

In case more trapping is desirable, it should be a part of page making process. If you are going to use a layout application's trapping (InDesign), the PDF pages must be outputted as separated files.

1.2.6 Overprint settings at Hansaprint

Overprinting means that the printing colours are on top of each other. A layout application defines whether a colour is the result of overprinting or non-overprinting. As a default setting, coloured elements should not be overprinting elements.

Hansaprint uses the following settings in its prepress workflow (notify these settings carefully!):

1. 100% black is overprinting.
2. CMYK white is knocked out.
3. The overprint settings for coloured elements are preserved.

In other words, the prepress system ignores a document's 100% black and CMYK white settings. 100% black is always an overprint colour and colours under a CMYK white element are always knocked out.

When producing pages, please pay attention to the overprinting settings for coloured elements that will be preserved in Hansaprint's process. This will help you to avoid unexpected appearance in the final product.

NOTE! Metallic spot colours (like silver) must be knocked-out from other colours, because of their high opacity and quite weak ink trapping features.

Checking the overprint

In advance, check from the document that the print result will be as desired. You can do this, for example, using InDesign CS and CC versions or with Adobe Acrobat 6 Pro or newer versions.

In Acrobat 9 Pro and newer versions the overprint preview is set on in program's preferences, **General** → **Page Display**. If you do not have overprint setting on, Acrobat discards the document's overprint settings on screen.

Overprinting can be checked also with Acrobat's **Output Preview** option. In Acrobat Pro XI do as follows:

1. Open a PDF file and choose from **Tools** menu **Print Production** and **Output Preview**.
2. Check **Simulate Overprinting**.
3. Check on the monitor that the page looks the way you want. With Overprint Preview you can see overprinting even more clearly, when you choose **Color Warnings** and tick the **Show Overprinting**.

NOTE! If you have a printed proof, its validity depends on the settings of the printer or RIP, which might differ from Hansaprint's settings.

Setting 1: Set 100 % Black to Overprint

Setting at Hansaprint: **ON** In other words, the document settings are discarded.

The setting is on, because a black body text is often placed on a coloured surface. If the colour surface is opened under the text, a slight misregistration will disturb the reading of the text.

With this setting 100% black is always the overprinting colour, regardless of the settings in a document.

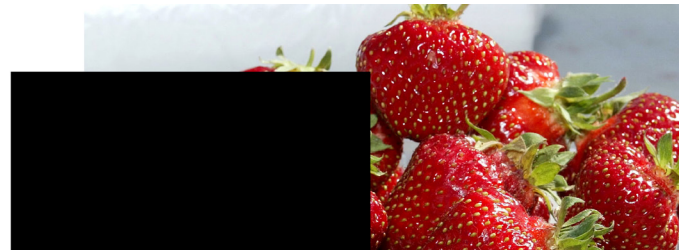
NOTE! Pay attention to this also when you are preparing versions with black colour change.

Example: 100% black element on a picture.

Print result: The tones in the picture can be seen under the 100% black element, because it cannot fully hide the picture. The darkness of the black element varies according to the tones in the picture.

Correction: Change the tone of the element to something other than 100% black, e.g. add 5% cyan or make a rich black. The image will then be opened under the element.

NOTE! Do not use the correction to black body text. It must be always pure 100% black.



Desired result



Printed result

Setting 2: Set Overprint CMYK White to Knock Out

Setting at Hansaprint: **ON** In other words, the document settings are discarded.

Example: White text defined incorrectly as overprint colour.

NOTE! If you are viewing this situation in Acrobat with Overprint Preview on, you can see only the yellow element, because white text is transparent in 4-colour printing.

Print result: White text is seen in the yellow element, because its overprint definition is removed in Hansaprint's prepress process.

Correction: Is corrected in Hansaprint's prepress process. Still the best solution is to correct the problem already in your native document, provided that you notice the problem, e.g. with Acrobat's Overprint Preview.



Original PDF file viewed in Acrobat with Overprint Preview.



Print result

Setting 3: Set Colors to Knock Out

Setting at Hansaprint: **OFF** In other words, the document settings are preserved.

Example: Text defined incorrectly as overprint colour. In the printed product the text should have a blue colour.

Print result: Text has dark green or dark grey colour, because yellow surface is not opened under the text.

Correction: The overprinting definition must be removed in the original document.



Desired result



Print result

1.3 Fonts

Use Adobe Type 1 or Open Type fonts. Other font types can cause faulty appearance in prepress process.

Avoid font problems

- If you make a PostScript file, include all the fonts that you use.
- Convert fonts in EPS files into paths.
- Don't use so-called system fonts. They vary slightly in different operating systems and might cause erroneous word division in texts, even in PDF files.
- Don't ever use "fast buttons" in software when changing a font to italics, bold, underlined, shaded or transparent. Changes made with fast buttons behave differently depending on fonts or RIP. To avoid these problems, always use genuine fonts.

1.4 Use of images

1.4.1 Image resolution

Ensure that the image resolution is sufficient for printing. Ideally the image resolution is twice the screen line. The screen line ruling is determined according to the used paper and press.

Guideline values for image resolution:

Print Method	Paper Coating	Resolution ppi	Screen ruling lpi (lcm)
Sheetfed (SFO)	Heavy/Medium Weight Coated (HWC)	350	175 (70)
Heatset (HSWO)	Medium Weight Coated (MWC)	350	175 (70)
Heatset (HSWO)	Machine Finished Coated (MFC)	300	150 (60)
Heatset (HSWO)	Uncoated	240–266	120-133 (48-54)

Preparing the images with resolution 350 ppi, you ensure the resolution is sufficient for all printing. If you know the used paper and press combination, you can surely prepare the images to a lower resolution. As a benefit you'll get a smaller file size, otherwise it has no importance.

NOTE! Enlarging the image in a layout reduces the effective resolution. E.g. after enlarging a 350 ppi image to 200%, the real resolution is no more than 175 ppi.

1.4.2 Total Ink Coverage in CMYK images

The total sum, in percentage, of partial colours in the darker areas of an image are determined according to the paper and press used. In addition, this value is also affected by any UCR or GCR function that is used. Today, the ICC profiles include this information. By using a proper profile in colour separation a correct TIC value is determined automatically into the images.

The total ink values used for standard output profiles are described in the table below. The total ink values in the table – and the functionality of the profiles – are based on the printing according the values defined in standard.

Guideline values for Total Ink Coverage (TIC):

Print method	Paper coating	Ink coverage %
Sheetfed (SFO)	Coated (HWC)	300–330
Heatset (HSWO)	Coated (LWC, MWC)	300
Heatset (HSWO)	Machine Finished Coated (MFC)	280
Heatset (HSWO)	Uncoated	260–270

1.4.3 Dot gain

Dot gain is determined in images according to the print method, paper and the colours used. Hansaprint follows the dot gain values defined in ISO 12647-2 standard. The dot gain increases gradually when going from heavy coated paper to newsprint paper. Also, dot gain values are included in an ICC profile. For this reason, it is important to know at the image production stage from which process and on what kind of paper the job will be printed, and then use a proper output profile for the CMYK conversion.

1.4.4 Enlargement of images in publications

If the image resolution is in accordance with the guideline values, you can safely scale the image in publications by 50% to 130%. The greater the change in image enlargement, the poorer the quality of the printed image.

If you intend to reduce the size of the image by more than 50%, make the change in the image processing program.

1.4.5 Image format

The colour format of images must be CMYK, when making print ready PDF. Further information is given in item 3.1.2 Supported image formats.

1.4.6 Image linking

The images ought to be in the publication as links (supplied as documents). Don't position an image in the publication so that a highres copy of the image is inside the publication.

1.5 Raw text

Raw text material should be saved in RTF format.

1.6 Proofs

Always supply a proof of the very latest version. If possible, a 1:1 scale version of the proof should be given. If the proof is not 1:1 scale, this should be clearly marked.

Digital proofs can be divided into two groups, content proofs and contract proofs.

1.6.1 Content proof

The proof is produced using a printer or copier. The proof can be used to make a rough check on the accuracy of the text and colouring ("red is red"), but the colours do not correspond to the printed end product.

1.6.2 Contract proof

By contract proofs is meant proofs which can be used to check colour tones. The proof is made on a proofer calibrated for print quality. The validity of a contract proof must be checked by measuring a color bar, like Fogra Media Wedge, which has been printed on the proof. The proof is acceptable, when all tolerances are passed. Equip the proof with the OK-label of an acceptable measurement.

NOTE! With contract proofs the following limitations may be encountered:

- It is not always possible to predict the influence on print quality of the paper used in the printing.
- It is not always possible keep the final printed product identical to the proof as far as all colour tones are concerned.
- If the digital proof technique does not produce halftone dots, moiré effects caused e.g. by difficult textile patterns might not be reproduced on the proofs.

1.6.3 Observing environments of proofs

The colours of contract proofs, as well print, must be examined in standard lights D50 (5000 K).

NOTE! A change in lights changes also the viewing of colours in a observer's eye. Note, that between print and proof, the change can be different due to different materials.

2. Colour Management

2.1 ICC-profiles

When you are preparing images and proofs for printing, use for separation and proofing the ICC profiles recommended by Hansaprint. These profiles are descriptions of the colour separations that are suitable for our printing processes. This means that a profile contains information on dot gain, trapping, etc. All of our profiles are output profiles.

When the profiles are used for colour separation, proofing or monitor acceptance, be sure that the procedure is performed correctly. For example, if the profile is used for proofing, should your proofing workflow support ICC-profiles. It is also very important that the proofer itself is calibrated and profiled. The profiles used for simulation should be able to be read from the proofs.

When using output profiles for CMYK conversion, you should remember that low quality pictures do not improve by the profile. The profile only optimizes the colour separation for the printing process used.

How to choose a proper profile?

All of our profiles are made for traditional screening. You should select the correct one according to the:

- paper quality
- printing method (sheet-fed offset/web offset).

You can find all of the necessary profiles from our website, www.hansaprint.com.

NOTE! If you don't know which profile should be used, ask always from Hansaprint, see "7. Following of instructions and contact details" on page 13.

2.2 Softproofing with a profile

When you want to simulate a profile on screen, do as follows:

1. Make sure that your monitor is calibrated.
2. In Photoshop, open the image using the embedded profile. If a profile is not embedded, use the profile in which the image has been adjusted.
3. Select the desired profile from the **View/Proof Setup/Custom** menu.

4. If a CMYK image has another embedded profile, check **Preserve Color Numbers**.

NOTE! This is not active in the case of a RGB image.

5. Check 'Paper White' (Simulate Paper Color).

2.3 Proofing with a profile

If you make a proof with digital printer, do as follows:

1. Make sure, that your proofer supports colour management.
2. Calibrate the proofer and use the paper profile together with a proper output profile.
3. Certify the proof by outputting a measurable scale – like Fogra Media Wedge – on the proof. Then measure the scale and let the software make the comparison between the measurement and the corresponding values of output profile used. When the measured values are inside tolerance, the proof is acceptable and certified.

2.4 Profile conversion in image processing application

RGB-to-CMYK

Hansaprint recommends the following procedure for RGB → CMYK conversion (separation):

1. Make sure that the RGB image uses a proper working space profile (source profile). This means the profile that was used when adjusting and approving the RGB image.
2. In Photoshop, move to **Convert to Profile...** menu.
3. Select the desired output profile as the destination profile.
4. The rendering intent can be chosen by comparing different intents and choosing the one that provides the best result. The best result is often achieved with **Relative Colorimetric** intent, which Hansaprint also recommends for most cases.

CMYK-to-CMYK

In the case there has not been used a profile recommended by Hansaprint in a CMYK separation, ensure the functionality of the image by proofing it with a profile we recommend. If there is a clear difference, make the CMYK-to-CMYK conversion as following:

1. As a source use the profile used in the first CMYK separation.
2. Use a correct profile as a destination profile.
3. Use **Relative Colorimetric** intent.

NOTE! In the case all elements of a document are in CMYK already in InDesign application, use for PDF export the joboptions without color conversion. You can download the joboptions file from www.hansaprint.fi.

2.5 Profile conversion when exporting PDF

The profile conversion can be done when exporting PDF file in InDesign. This kind of workflow is used normally, when the layout contains images in RGB mode. The benefit is, that there is no need to archive CMYK images.

If you are going to use this method, notify the following:

- you must make all adjustment to the images in RGB mode also the sharpening of images.
- you must use same rendering intent for all images on a page.
- make sure that all other elements than images in the layout are in CMYK mode.
- we recommend the use of **ID joboptions** -PDF joboptions file, which you can download from Hansaprint's website. The settings of the joboptions are shown next. The settings are base on PDF/X-4 standard.

NOTE! Joboptions include install instructions.

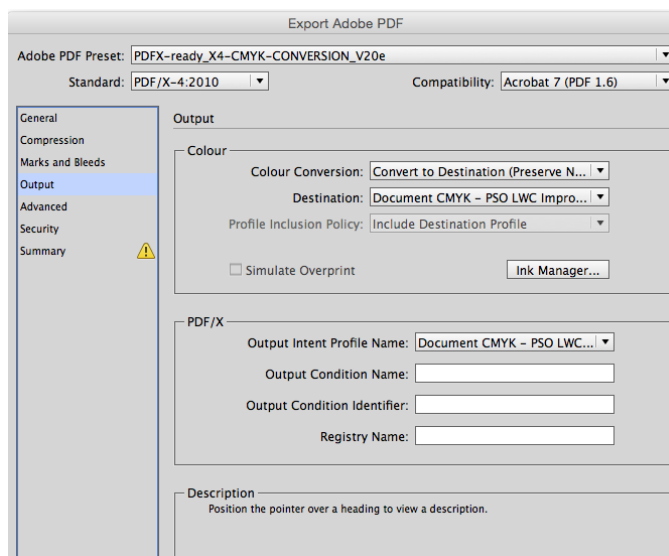
Do as following (InDesign CC):

4. In colour settings check that in **Working Spaces -> CMYK** is selected the **proper output profile**. This means the profile, which the printhouse has recommended to use for CMYK conversion. You can download the proper .csf from Hansaprint's website.
5. In InDesign choose **Export...**
6. On the Output tab in **Colour** check the following settings:
 - Colour Conversion: **Convert to Destination (Preserve Numbers)**
 - Destination: Check the output profile is correct.
 - Profile Inclusion Policy: **Include Destination Profile**.
7. Make sure that the setting on the other tabs are correct and then export the PDF.

NOTE! It is important to use the alternative "Convert to Destination (Preserve Numbers)". This settings makes a conversion only to the images which are in RGB mode, or to the CMYK images which have embedd some other output profile than the destination profile here.

NOTE! In CMYK-to-CMYK conversion is provided that *Preserve Embedded Profiles* is selected also in the CMYK policy of Colour Settings, when the InDesign document is prepared.

NOTE! In order to avoid unwanted color conversion make sure there is the **same CMYK profile** both in Colour Settings and as Destination profile. You can download the InDesign Colour Settings files from Hansaprint's website, see the chapter "2.8 Color management in page layout application" on page 8.



Profile conversion when exporting a PDF file. **NOTE!** Make sure that you select as a destination profile the specific output profile recommended by Hansaprint.

2.6 Profile conversion at Hansaprint

You can also let Hansaprint to make the CMYK conversion. In that case prepare the PDF files, where images are in RGB mode and all other elements in CMYK mode.

NOTE! It is important, that you in advance tell about the RGB images to your contact person at Hansaprint. Doing that you ensure the proper ICC profile will be used to the images.

NOTE! Colour tones are not reviewed after the CMYK conversion by Hansaprint. With RGB images we recommend the use of InSite workflow. Then you have possibility to download processed CMYK

files on your computer for checking. See closer information of InSite in chapter "5. Kodak InSite prepress portal" on page 12.

2.7 Profiles and print-ready PDFs

In a totally CMYK-format print-ready PDF file with, there is no need to have profiles with the images. Instead, if the images are in RGB format, it is recommended the RGB profiles are embedded. If a profile is missing, the system uses Adobe RGB (1998) as a source profile.

2.8 Color management in page layout application

If you know the paper and printing method when preparing a document, then choose the color settings according them. You are able to download the color settings files **Adobe Creative Cloud väriasetustiedostot (.csf)** for different paper types from Hansaprint's website. File names include the names of the recommended standard (CMYK) profiles.

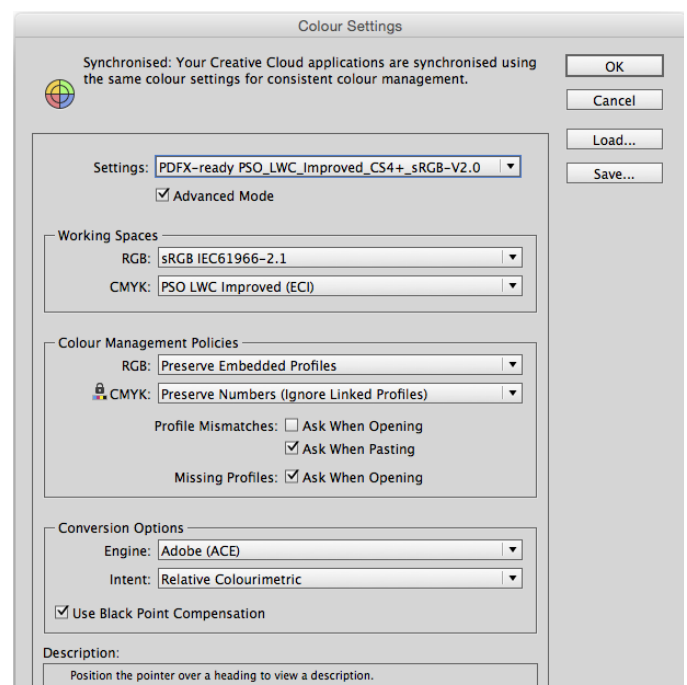
It is worth to change the color settings in Adobe Bridge application, then the system synchronizes the same profile to all Adobe CC applications.

NOTE! Color settings file include install instructions.

Do as follows in Adobe Bridge CC application:

1. Go to **Color Settings** (Edit —> Color Settings)
2. From the **Color Settings** list choose a proper settingsfile according to the CMYK profile.
3. Accept settings by clicking **Apply**.

NOTE! If you attend to make the CMYK conversion while exporting PDF, you should choose the color setting file according to same profile as you use as the destination profile in InDesign's export settings. See Export settings in chapter "3.2.5 PDF output with InDesign Export command" on page 10.



Color Settings in InDesign. The color settings file (.csf) chosen in Adobe Bridge shows in Settings. Its name contains the same profile, which has been selected in Working Spaces —> CMYK.

3. Material delivery

What material is the best and when? This section deals with the different ways that material can be delivered to the printing plant. Digital material can be delivered in two different ways: in document format or in closed format. A closed format is the safest and, from the point of view of quality, the best way to deliver completely ready material to the printers. Our repro department is at your service with respect to page pre-paration of editorial material for magazine and other publications.

If you don't use Hansaprint's graphic design unit, we always require the closed format delivery.

3.1 Delivery in open format

If you use an open format, please check that all the material relating to the work is included. Delivery in document format means that e.g. InDesign document is sent to the printing plant complete with all related files (images, logos, fonts, eps files, tiff files etc.). The printers open the delivered document and update all the necessary fonts and links and output the document in the desired form (file, proof).

Send the files as line transfer or by saving the documents on transferable media (CD-ROM, DVD, USB). Image originals and proofs of layout designs can be sent by post or courier.

Although we will endeavour to the best of our ability to handle your data safely in our system, never send us irreplaceable original files; always send copies. Although we will endeavour to the best of our ability to handle your data safely in our system, never send us irreplaceable original files; always send copies.

If you do not use Hansaprint' repro, we recommend that the material is delivered in closed format.

3.1.1 Supported software

Only Macintosh OSX versions of software are supported. Hansaprint supports Adobe Creative Suite (CS) and Creative Cloud (CC) product families. We use the newest software versions, which are available in Finland.

3.1.2 Material enclosed along with the document and its organisation

Linked files

Enclose all the necessary line and tone images (generally .eps or .tif). Ensure that all the fonts in logos and such like have been converted into paths.

Supported image formats

Hansaprint supports EPS, TIFF and SCITEX CT, which are in composite form. Don't use DCS images. Remember to give images sufficient resolution.

Fonts

Use Adobe Type 1 or Open Type fonts, enclose them along with the material. Further information about the use of fonts can be found in section "1.3 Fonts" on page 6.

Proofing

Always supply a proof of the very latest version. After treatment, material delivered in document format will be proofed at Hansaprint.

3.2 Delivery in closed format

The closed format is the safest and best way to deliver print-ready material to a print house. With closed format, delivery means that one file contains all the material, in other words all the linked images, logos, graphics and fonts. A closed format file can have many pages just like a document.

Hansaprint supports as closed format PDF. If you want to use some other closed format, contact Hansaprint prepress to ensure its suitability.

3.2.1 PDF

Material consisting of a PDF file contains all the required elements. Everything belonging to the page – text, images, graphics and fonts – is packed into a single file, which in practice is locked. When material is delivered in this way, you can be highly confident that it will be printed at the printers in the same way as it was during the planning stage.

We do not proof PDF files in Hansaprint. Always supply the proof from the very latest version.

3.2.2 PDF colour mode

We recommend that all elements in a PDF file are in CMYK colour mode. However, you can make a PDF file, where images are in RGB mode but all the other elements must be in CMYK mode.

IMPORTANT! In the case you deliver PDF file, where images are in RGB mode, inform this always beforehand to your contact at Hansaprint. Then it is on Hansaprint's responsibility to use the correct ICC profile for CMYK conversion. The conversion result (colour tones, etc) is not checked by Hansaprint. See closer chapter "2.6 Profile conversion at Hansaprint" on page 8.

3.2.3 Preparing a PDF file

A PDF file is made with Adobe applications as following ways:

1. either exporting from InDesign or saving in Illustrator.
2. or in a two-stage process printing first a PostScript file (.ps) from a layout or graphic application and then making a PDF file from the ps-file in Adobe Distiller.

All elements embedded

The PDF file must contain all elements and fonts. Make sure, if you have linked EPS files to your advertisement, that the fonts they require are also included in the file. The surest way of ensuring this is to convert the fonts used in logos and such like to vector graphics.

Output as single pages

Saving pages as spreads is not allowed, but the pages must be printed as single pages. One file can still include several pages, but the page numbers must definitively be consecutive. However, the clearest way is to save one page per a file.

Corrected pages

If you send pages for replacing, send only the corrected pages and only one page per a file. So you can be sure only the corrected pages will be changed.

3.2.4 PDF settings

Download Hansaprint's PDF settings – joboptions file – from our website www.hansaprint.com, [Material Instructions](#). Next some comments about settings.

Image compression

In Hansaprint's settings has been used **JPEG compression** with **Maximum quality**.

Image resolution

Image resolution is not downsampled.

PDF format

Asetustiedosto käyttää PDF/X-4:2010 standardia ja on yhteensopiva PDF-formaatin 1.6 (Acrobat 7) kanssa. PDF/X-4 standardi tukee InDesignissa käytettyjä läpinäkyviä elementtejä. Hyväksymme kuitenkin myös formaatilla 1.3, 1.4 ja 1.5 tehdyt PDF-tiedostot. Joboptions file is based on PDF/X-4 standard and is compatible with PDF format 1.6. PDF/X-4 standard supports transparency made in InDesign. However, we accept also PDF files produced by the formats 1.3, 1.4 and 1.5.

Color Conversion

PDF settings are working as follows:

- RGB images are converted to CMYK. If an RGB image has an embedded profile, this is used as a source profile. If the image has not embedded profile, the system uses the RGB profile defined in color settings.
- CMYK images having some else profile as the destination profile will be converted to the destination profile.
- CMYK without an embedded profile will be not converted.
- InDesign's native elements (text, etc) will be not converted.

NOTE! VCheck always in Output → Destination, that the proper destination profile is selected.

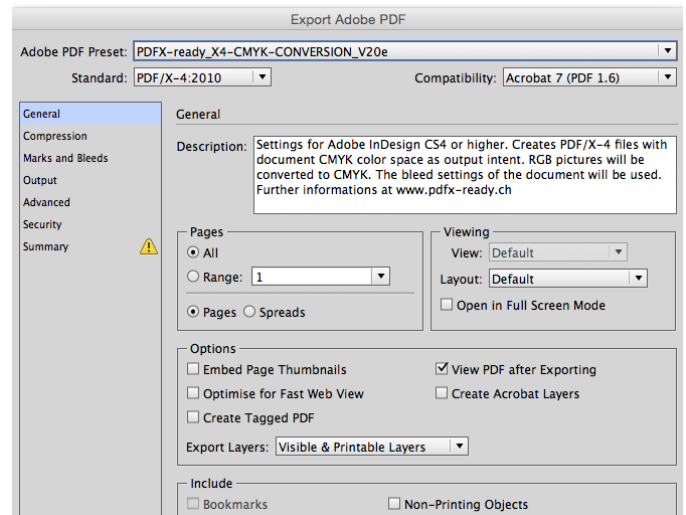
NOTE! CMYK conversion is made only to images when needed. All other elements must be in CMYK mode already in InDesign document.

3.2.5 PDF output with InDesign Export command

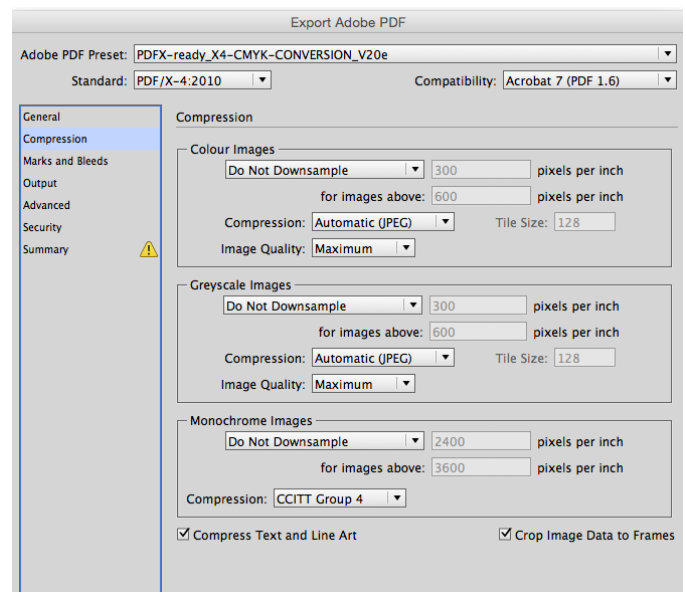
From InDesign CS and CC versions you can output a PDF file using the Export command. With the other applications we recommend PDF preparation via the PostScript output.

From the following pictures you can find the proper Export settings for InDesign CC, which produce the PDF file according Hansaprint's requirements. Settings have been optimized for Kodak Prinergy workflow system and offset production. You are able to download the settings from our website www.hansaprint.com, [Material Instructions](#).

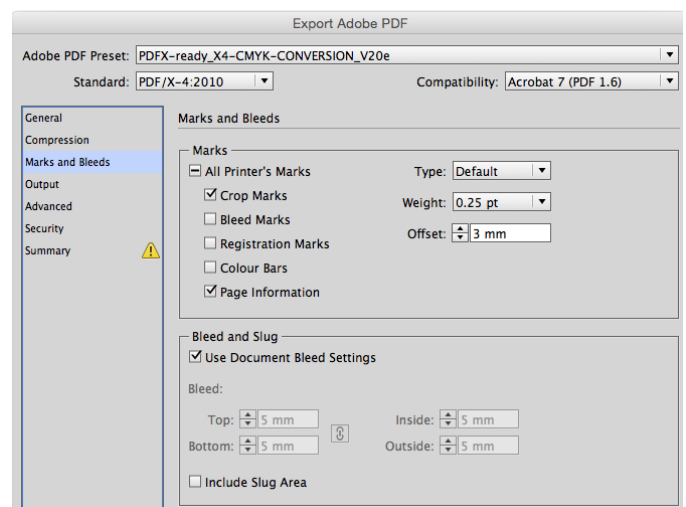
NOTE! Before exporting see the colour specifications from paragraphs "1.2.1 4-colour production", "" and "1.2.3 Transparent elements" on page 4, and also the colour settings of InDesign from paragraph "2.8 Color management in page layout application" on page 8.



1. General

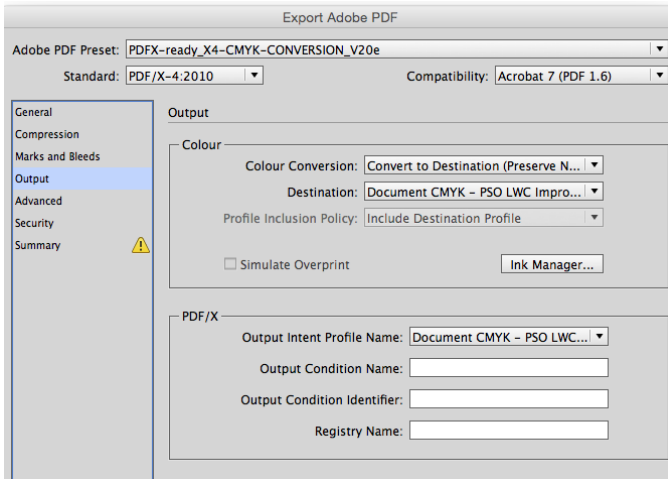


2. Compression



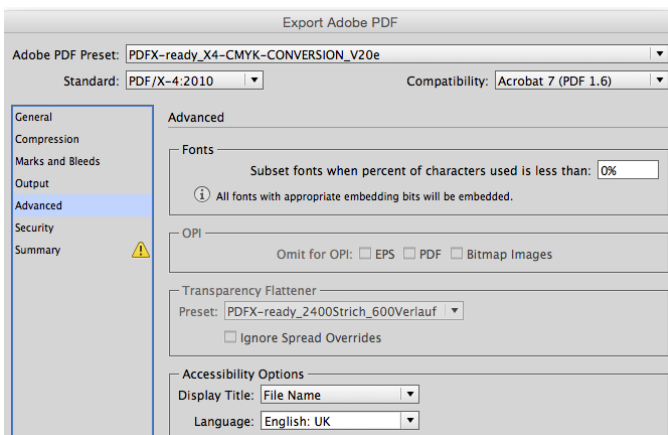
3. Marks and Bleeds

NOTE! Check, that there is 5 mm bleed in the document setup and the elements extend at least 5 mm over the trim box in the document.

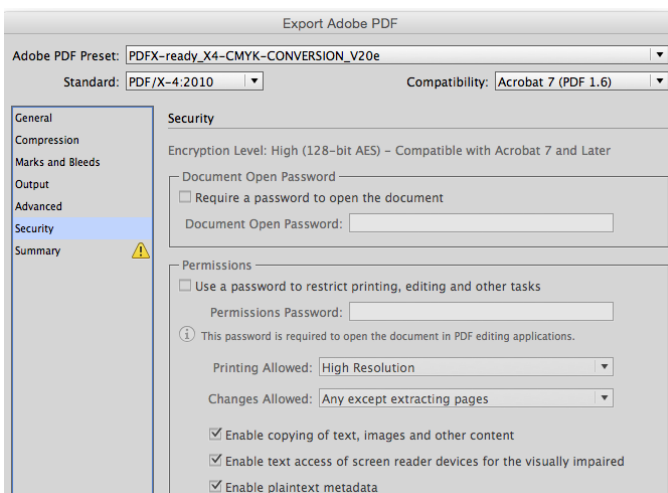


4. Output

NOTE! In a 4-colour job check the possible spot colors by clicking the **Ink Manager...** button. If needed, check the tab **All Spots to Process**.



5. Advanced



6. Security

3.2.6 PDF review

Open the PDF file with Acrobat and check at least the following:

- the page size (trim box) is as agreed
- bleed is minimum 3 mm, recommended 5 mm
- crop marks

- overprinting (Output Preview -> Simulate Overprinting). 100% black body text should be always overprinting.
- all elements are in CMYK format
- images are with high resolution.

PDF/X-4 based preflight you can do in Acrobat, download the preflight profile from www.hansaprint.fi.

You can check the PDF files also using software like PitStop, a plugin for Adobe Acrobat. PitStop creates a report, from which you can check, e.g. colour space, embedding of fonts and resolution of image files.

If you use Hansaprint's Kodak InSite service, you can check the PDF files with InSite. If you are interested the use of InSite, ask closer information from your contact person at Hansaprint, "5. Kodak InSite prepress portal" on page 12.

3.2.7 Other Closed Formats

Contact our customer service or technical support if you want to send material in a format other than PDF.

3.2.8 Testing a File

When a new customer sends material in closed format, a test file must be first run in our process beforehand, in order to ensure that the files are working when the real production starts.

Contact to our customer service or technical support when sending a test file. Hansaprint tests the file until the imposition stage.

3.3 Version Changes

When there are changing elements like logos and language versions in the job, it must be considered in which way the elements will be delivered to Hansaprint. For the first time, it is good to make sure which is the best way to produce the change versions with Hansaprint.

4-Colour Change

It is clear when the change is in 4 colours. You just prepare your own files for every version.

Logo Change in Black Colour

If a logo change is only in black, for every logo prepare its own PDF page and ensure that the logo is placed in right position. The page size should be same as the original page.

NOTE! If the logo is placed on another element, check the transparency of the background of a logo. You can check the transparency, e.g. by placing the logo on a colour element in a layout program.

Changes in Black Text

If only black text is to be changed, make one image PDF file and additional PDF files for each language version. The black image file and black text file are combined by Hansaprint in the imposition. You can produce the files, e.g. by locking the images in the layout application and duplicating this file for each language version.

Another possibility is to make only one file and use different layers for different language versions. As said earlier, if the job includes many changes, confirm the best procedure with your contact person at Hansaprint.

4. Material transfer

We prefer ftp or Kodak InSite as a default transfer method of material. For spot jobs we offer also www-transfer, which however should not use for the large file sizes.

When you send material by FTP, alert us to the fact by e-mail and enclose your contact details, e.g. your e-mail address. InSite instead sends email messages automatically from certain events like uploading.

If you are in any doubt it is worthwhile checking with an expert or your contact person.

4.1 Line transfer

You can transfer material to Hansaprint in the following ways.

4.1.1 FTP

Hansaprint FTP server can be found at the address <ftp.hansaprint.fi>. To make a connection with the server, you need your own username and password. You can order them from Hansaprint customer service. The username points to your own folder, where other customers have no access. Use specific ftp software, like FileZilla.

Closed format files (PDF) you can send as they are. When you send material in document format, the document and all of the material enclosed with it (images, fonts, logos, etc.) have to be compressed with a compression program to zip file.

After sending the material, send us an e-mail telling us what you have sent.

4.1.2 Kodak InSite transfer

If you are using InSite prepress portal system for to review and approve pages, you can also use this interface for file transfer. The benefit with this transfer is, that you can make the transfer with a web browser where ever there is an internet connection. To the InSite transfer it is possible to add the preflight function for the technical checking of the material. In InSite each customer has its own account and the users need to have username and password.

4.1.3 www-transfer

You can use www-transfer to send a spot job. However, if the file size is large, use other transfer possibilities like ftp. You can access to the secured service with the address <https://secure.hansaprint.net/material>.
Username: hpupload
Password: Transfer9

4.1.4 As an e-mail attachment file

Hansaprint does not recommend the sending of material as an e-mail attachment file. If material is sent by this method, however, the following factors should be taken into account:

- only send attachments files of less than 10 MB
- as with other methods of sending, please confirm that your material has reached its destination.
- send e-mail to the following address:
media@hansaprint.fi

4.2 Supported media

At the present time we support the following media:

- CD ROM (hybrid format)
- DVD
- USB memory stick.

5. Kodak InSite prepress portal

Hansaprint offers to its customers web browser based Kodak InSite prepress portal service. With InSite you can upload printready PDF files and after that review and approve the material page by page. InSite is a user-friendly system and it can be used where ever there is an internet connection.

5.1. InSite workflow

With InSite it is possible to upload highres PDF files instead of ftp. Or alternatively the ftp transfer can be connected automatically to InSite.

In normal case the workflow has been automated so, that the pages appear immediately in InSite after processing. Then the customer gets also an immediate feedback from the functionality of files. It is possible to add separate preflight function to the workflow to get even more detailed information of possible technical warnings or errors.

The automated process requires exact file naming, in order to system can impose pages to correct page number order.

InSite workflow provides that the pages are approved by the customer. If you find a mistake on a page, then you can reject the page and send a new corrected page. When all pages have been approved by the customer, Hansaprint continues its own prepress process.

If you are interested in InSite, ask more from your contact person at Hansaprint.

NOTE! InSite iPad apps is available for Kodak InSite. You can download it from App Store. iPad apps is not full InSite version, but you can review, reject and approve pages with it.

6. Ecolabels

It is possible to have different kind of ecolabels to the products printed at Hansaprint. The use of ecolabels must be always agreed separately when making purchase order, because each label has its own requirements for the printed product and especially for the used paper. Hansaprint has certificates mentioned below.

6.1 Certified ecolabels

6.1.1 Nordic Ecolabel

The Swan is the common ecolabel in the Nordic region. It is the only official ecolabel that describes the environmental effects of a printed product in the Nordic countries. Can be used together with the other ecolabels.

6.1.2 PEFC

The Chain-of-Custody system. In a PEFC certified paper has been used wood fibre that originates only from supervised sources. Can be used together with Nordic Ecolabel.

6.1.3 ISO 9001 and ISO 14001

Hansaprint's quality and environment certificates are allowed to be mentioned in print products. For example: "This print product has been produced according to international ISO 9001 quality and ISO 14001 environment standards."

6.2 Rules when using ecolabels

When using labels notify following rules:

- The use of labels must be always agreed separately with a sales person at Hansaprint.
- On the products printed at Hansaprint must always use the labels with Hansaprint's licence number. Ask the original files from Hansaprint.
- The text of the label must be readable in the final product. Don't scale the label too small.
- The label must be placed on a page so that the reader does not get a wrong impression of its target. In other words the label is related to the printed product, not for example to a company or a product mentioned in a same page.

See more about the ecolabels from the document at our website, [Ecolabels in Hansaprint's print products](#) (pdf).

7. Following of instructions and contact details

7.1 Material delivered contrary to instructions

We charge an additional fee of 85 euros/hour (excl. VAT) for handling material delivered contrary to instructions. If material delivered contrary to instructions cannot be approved by the customer for scheduling reasons, Hansaprint is not responsible for any errors.

7.2 Instruction updates

Where software and computers are concerned, changes to these instructions can occur. Up-to-date information can be obtained from Hansaprint's webpages at the address: www.hansaprint.com.

7.3 Hansaprint contacts

Hansaprint Turku

Magazines and marketing brochures

- Jouko Virtanen, tel: +358 (0)10 542 4487
(jouko.virtanen@hansaprint.fi)

Directory products

Contact Hansa Directories customer service.

Hansaprint Vantaa

Magazines and marketing brochures

- Marjukka Melender, tel: +358 (0)10 542 5944
(marjukka.melender@hansaprint.fi)

7.4 Hansaprint addresses

Hansaprint Turku

P.O. Box 501, FIN-20101 TURKU

Tel. +358 (0)10 5422

Fax. +358 (0)10 542 4425

Visiting address: Artukaistentie 10, FIN-20240 TURKU

Hansaprint Vantaa

P.O. Box 29, FIN-01621 VANTAA

Tel. +358 (0)10 5422

Fax: +358 (0)10 542 5868 (prepress)

Visiting address: Petikontie 6, 01720 VANTAA

8. Downloads

Download instructions, setting files and print profiles from [Hansaprints website](#). For setting files and profiles there are also instructions, where they are installed and how to start to use them.

8.1 Prepress instructions

Prepress guide in PDF format

Detailed guide for preparing printing material.

Prepress quick guide in PDF format

The most important prepress instructions as a quick guide.

8.2 PDF joboptions for InDesign

8.2.1 PDF joboptions without CMYK conversion of images

Prepares PDF file according to PDF/X-4 standard. Use this,

- when all elements in a document are in CMYK format in the layout application.
- or when images are in RGB format and you want the CMYK conversion to be done by Hansaprint.
NOTE! Inform always the latter option to Hansaprint to make sure that proper ICC profile will be used.

8.2.2 PDF joboptions with CMYK conversion of images

Prepares PDF file according to PDF/X-4 standard. Use this, when images or some of images are in RGB mode. Notify the following:

- In InDesign's Export settings (Output tab) select the proper profile according to print substrate (paper type) and print method (Sheetfed offset or heatset web offset). If needed, ask from Hansaprint.
- In InDesign's Color Settings use the settings of correspond profile. E.g. if the destination profile is PSO LWC Improved, use then the color settings of this profile.
- In InDesign document all other elements except images must be in CMYK mode.

8.3 Color Settings

Color Settings files for Adobe CC applications. Apply settings with Adobe Bridge CC application to get same settings synchronized simultaneously to all Adobe CC applications.

8.4 Hansaprint's ICC profiles

Print profiles for CMYK conversion and proofing. Choose a profile according the paper type and print method (heatset web offset (HSWO) or Sheetfed offset (SFO)).

8.5 Page Exporter Utility script for InDesign

By Page Exporter Utility script you can – with one command – name and output 1-page files from a InDesign document. For example from a 32 pages document the script outputs using InDesign's export preset 32 single page files adding page numbers to filenames. The instructions come with the script.

8.6 PDF preflight profile

Settings to preflight PDF files in Acrobat Pro application. Based on PDF/X-4 standard. To use these settings, the pdf file must be done according to PDF/X-4 standard.