
Preparation of PDF files

- We highly recommend exporting PDF files for press with a standard setting: PDF/X-1 to PDF/X-4.
- PDF file should have an Output intent set to an ICC color profile corresponding to the paper that is going to be used in printing (for coated paper – ISO coated V2, for uncoated paper - PSO uncoated. If you are unfamiliar with ICC profile handling, you can also use a default profile Coated Fogra 39 which usually comes bundled with graphic software. In such case, any additional color management will be handled in our prepress.
- When preparing files for a brochure publication, all interior pages should be exported in one PDF file. However, the size of the file shall not exceed 1 GB limit. We recommend using **maximum quality JPEG** compression setting to achieve that.
- Do not use "export as spreads" setting for interior pages. PDF file should be exported in single pages mode.
- Make sure to include appropriate titles (cover, interior, endpapers) in filenames which would represent the purpose of the file.
- File for the cover shall be prepared as a flat-layout (spread) including front, back cover and the spine. If the cover has printing on the inner side, it should also be prepared in the same way (as a spread). Please mind that on the inner side the spine and 6-8 mm area around it will be used up for gluing and will not be visible on a finished brochure.

File preparation for UV spot varnishing, screenprinting, foil, embossing and debossing:

- Files for each of the finishing techniques (UV spot varnishing, screenprinting, foil, embossing and debossing) shall be provided separately from the main print file. File for each of the finishing techniques should be same size and format (PDF) as the main print file.
- Elements prepared for finishing shall be filled with 100 % Black. If UV spot, screenprinting, foil, embossing and debossing objects replicate any objects in the print file, the position and scale of these objects should match precisely. Please avoid using finishing techniques on texts smaller than 6pt and line elements thinner than 0,1 mm. Please keep a minimum distance of 0,4 mm between two separate objects with a finishing applied (two lines for example).

File preparation for die-cutting

- A PDF format file shall be provided for die-cutting jobs. Dimensions in a die-cut file shall absolutely match the dimensions in product design file.

Trim-box, bleed and safe zone

Every print-ready file must contain:

- **A trim-box.** Trim-box is usually invisible in the PDF, but it is a crucial piece of information about products finished size.
- **Bleed.** All the objects in the file should either be contained within the safe zone or extended by at least 3mm into the bleed area (bleed-box).
- **Safe zone.** To avoid any cropping or covering all important objects (for example: text) should be kept within a certain area called the safe zone. This area should be distanced at least 3 mm from top, bottom and outer edges of the page and 10 mm from the inner (spine) side.

Images

- Make sure your design does not contain any low resolution elements. Recommended resolution range is 300-350 dpi for CMYK and Grayscale images, and 600-2540 dpi for one bit bitmap images.
- In any case quality of printed images of less than 150 dpi resolution may be low.
- Also we recommend using only CMYK or Grayscale images, as any RGB images will be automatically converted by our software into CMYK elements, while result may be not what you're expecting.

Fonts

- PDF – ensure you embed all fonts when making your PDF.
- EPS – ensure you convert all fonts into outlines when making your EPS.
- Smaller than 7 point font shall be composed only from one of these colours: 100 % Black, 100 % Cyan, 100 % Magenta, 100 % Yellow or 100 % Pantone.

Lines

- Lines shall be at least 0.08 mm thick.
- Colour of lines of 0.2 mm or less thickness shall be single coloured, moreover lines shall not be rasterized (100 % colours are required).

COLOURS

Spot colours

- Make sure spot colours you use are from Pantone library and are intended to be used in printing of your design.
- Do not leave any SPOT colours in CMYK designs; automatic colour conversion may give unexpected result. Most convenient way to check SPOT colours is to select separation preview function in the Acrobat Pro software. Do not use different Pantone colour palettes.

RGB colours

- Do not use RGB colours or elements within your design. Every RGB element will be automatically converted into CMYK, while result may not be as expected.
- Pure black (100% black) graphic objects will automatically be set to overprint in the prepress stage. Therefore black elements on nontransparent backgrounds (Pantone metallic colours, like PMS 871, 877) shall never be pure black or they might become dimmed. Other colours shall be added to the black mix (for example: C50 M40 Y30 K100) to prevent overprinting.
- Therefore we recommend supplementing black elements with other colours (except text < 24 pt and lines < 3 pt) (for example: C50 M40 Y30 K100). That is how we would get so called RICH BLACK. This would help us to avoid undesirable black overprints. Also black with other colours will become richer, than K100 alone.

GREY

- For the Grey background made of Black colour only we recommend using 5-40 % Black.
- For the Grey background made of CMYK we recommend using 5-20 % of CMY and 5-100 % of K 5-100 proc.
- Grey shall not be composed of CMY only, without Black, while share of Black shall be greater than CMY.

Overprint colours

- In case you accidentally set the "overprint" function for a filling or a line (which are overlaying other elements in the design), result will differ from the design, as paint is transparent.
- In order to check if the design is prepared correctly, activate the "Print Preview" function in Advanced/Print production menu of the "Acrobat Pro" software.

Fountain fills and transparencies

- Do not use fountain fills in spot colour jobs as this will cause your job to be rejected by prepress.
- Do not use transparency functions of Microsoft and CorelDraw software. Please flatten any transparencies in the Adobe Illustrator or the Indesign prior to generation of PDF.
- Never use multi-layer transparencies as this may cause problems when your file is processed through our workflow, and may not give the desired end result.

Total ink limit

- Do not apply any colour, which total ink limit exceeds 300% (which is calculated by summing all C, M, Y and K elements together) in your design.
- Please note, that our software will automatically decrease total ink limit till recommended for particular type of selected paper. For a coated paper - 330%, for uncoated paper - 300%. In general it will not affect colours, at least you will not notice much difference, however, in order to avoid such conversion, try not to overcome 300% of total ink limit.

Colour profiles

- We recommend using ISOcoated_v2_eci.icc color conversion profile for regular machine coated gloss, silk and mat papers. This profile allows maximum ink coverage up to 330 %. For high bulk coated papers (like Arctic Volume or similar) we recommend to use ISOcoated_v2_300_eci.icc profile, where maximum ink coverage of 300% is allowed.
- PSO_Uncoated_ISO12647_eci.icc conversion profile is recommended for uncoated paper, which limits the total ink coverage to 300%. If for some reason, total ink coverage in your file will be higher than 330% for coated paper and 300% for uncoated paper, additional color management will be applied by our prepress.

Colour / ink intensity tolerance

- Slight colour variance on a printed product is inevitable because of many factors influencing printing process. This means that colours may slightly differ from original design despite of printing quality, which is compatible with requirements of international standard and allowable tolerances.
- On jobs with multi sheet products (especially books and brochures) there may be a variance in colour within the design itself (within limits set by the standard).
- Also we would like to note, that subsequent reprints may slightly differ in colour as well.

Screen colours

- Image on the screen is composed of RGB colours; therefore it cannot be replicated with ink on paper exactly, where CMYK system is used. Moreover, screen image quality depends a lot on calibration of the screen.