

TECHNICAL CONDITIONS OF INITIAL PRINTING MATERIALS

1. OPERATING SYSTEM OF DTP STUDIO

- MacOS X 10.5.XX and 10.10.XX

2. GRAPHIC DESIGN SOFTWARE

- Adobe InDesignCS6
- Adobe PhotoshopCS6
- Adobe IllustratorCS6
- Adobe AcrobatPro
- Acrobat Distiller11

3. PRINT STANDARD

- According to ISO 12647-2

4. PREPARATION OF FILES

- Materials in digital form should be sent to the FTP server - you may get access to the server transmitted by contacting personnel from the Sales Department.
- Accepted format for closed files – Postscript level 2 compose, PDF 1.2;1.3;1.4 compose, generated by Adobe Acrobat Distiller starting from version 5.0. All file settings should be set to Press Quality.
- Accepted format for open files – EPS; TIFF (the Client's acceptance after the distillation in the Printing House is necessary).
- Resolution of the photos – 300 dpi. Other resolutions will mean the Client's acceptance for low quality.
- 1-bit-resolution images should not exceed 1200 dpi.
- Submitted files should be prepared in CMYK.
- It is recommended that any conversion from RGB to CMYK or Pantone be performed by the customer, because of the variety of interpretations of colors by different file processing devices.
- Additional colors such as PANTONE must be marked in a file by a separate spot color.
- Scanned files (copydot) should be avoided – TAKT is not responsible for the change of artwork and colors during the ripping process.
- Any additional information contained in the file (e.g., die-cutting, creasing, folding lines) should be placed on a separate layer, color spot, with an overprint attribute.
- Different components included in one artwork must be saved in separate files
- **Each page of artwork must be prepared on a separate PDF page.**

- Overprint is excluded in any objects beside the objects in 100% black.
- The composed files cannot be sent with trapping.
- All fonts used in the files absolutely must be included in the file (embedded fonts) or converted to outlines.
- Failure to meet the deadline of delivery may cause a delay in the delivery of the finished product, for which TAKT is not liable.

5. COLOUR SEPARATIONS - PROOFING

- Fogra 39 – color profile used for coated papers.
- Euroscale Uncoated v2 - color profile used for uncoated and offset papers
- In case no profile ICC is used, please comply with maximum ink coverage sum (Total Ink Limit):
 - 320% for coated paper,
 - 250% for uncoated paper.

6. LAYOUT

- Scale - 1:1.
- Page dimension - the same for all pages.
- Position of the image on the page – centered.
- Format signs - centered, minimum 3 mm from net format.
- Every artwork / page should have bleeds of at least 3 mm on all sides.
- Important text or artwork elements should be located at a distance of not less than 5 mm from the cutting line.
- There must be a 5 mm. free space from the spine page for the 2nd and 3rd page of the cover page and the first and last page of the inner pages (cut image) in case of soft perfect binding
- During the soft perfect bound process there is a reduction of the page effective format due to the bonding of the spine with the cover and therefore an incomplete opening of the book. Therefore, it is not advised to place any artwork on two adjacent pages because of low esthetic effect.
- The size of trim box must comply with the net page format.
- Artwork elements of the page shall not include:
 - added profiles, TAKT is not responsible for the conversion of graphics and colors produced during the ripping process,
 - OPI added comments
 - Postscript codes coming directly from CorelDraw.
- Minimal writing degree:
 - one color - 7pts,
 - multicolor, one-element - 8pts,
 - multicolor, two-element - 10pts,
 - in negative (reversed white on black background print) - 10pts.
- The lowest acceptable thickness of the line:
 - one color - 0,2pt,
 - multicolor and/in negative (reversed print) - 0,75pts.
- For a line with a thickness of less than 0.4pt with single-color printing, 100% coverage color is recommended.
- On several overlapping Pantone colors raster angles for each of the colors must be different.
- Black texts cannot be deepened (overlaid) by any of the other colors (difficulty with color matching).

- In order to achieve a greater black depth in large solid areas it should be generated from 4 colors. Recommended components are C 70, M 60, Y 60, K 100 for coated papers and C50, M40, Y40 and K100 for uncoated papers.
- In the case of reversed print on black background with 4 colors a negative trapping for CMYK size of 0,17 mm (0,5pt) is recommended.
- Correct gray prepared in CMYK should contain double K superiority over the rest of component colors.(It is recommended to form grey from K only to avoid color differences.
- In order to avoid color matching inaccuracy, a trapping should be formed, which is the minimal overlapping of colors. TAKT reserves the right to provide such service. The recommended trapping length is 0,035mm, in some cases up to 0,07mm.
- Black texts with a size less than or equal to 24 pt on a colored background (CMYK) must be overprinted. The exception is black text on metallic colors, where knockout should be used.
- Barcodes must be 100% opaque.
- Elements of hot stamping should not have knockouts in the artwork (foil is applied on the artwork which will allow the avoidance of mistakes with color matching).
- In the case of spot UV varnish it is recommended that the varnish does not overlap the cutting and creasing lines.
- The UV file must be prepared in Curves.
- To receive the correct reproduction of UV varnish the minimum width of the line must be 0,5mm (in negative–1mm)
- UV is not applied on uncoated papers.
- UV convex varnishing (3D) - the minimum width of the line must be 1,5mm. If elements of varnishing are wider than 10mm, the refraction toward the center may occur.
- Glittering – the minimum width of the line must be 2mm
- Hot stamping – the minimum width of the gilded line – 0,03mm
- The minimum gap between gilded lines - 0,04mm
- In the case of books, it is recommended that the materials are prepared in accordance with the BK specification created in TAKT.
- Preparing hot stamping files - minimal sizes of the elements:
 - the minimal width of a gilded line - 0,03 mm
 - the minimal gap between gilded lines - 0,04 mm
- Preparing artwork with hot stamping/ gilt
 - underprints and hot stamping files cannot be made in a 1:1 scale without any displacements
 - it is possible to have files (underprint and hot stamping) in a 1:1 scale if there is the minimum displacement of 1 mm having the pseudo 3 D effect.

7. PROOF

- It is recommended to use a contract proof for each color page different than black.
- For color proofs the TAKT' ICC profile should be used.
- Each color proof should include: the name of ICC profile, collection title and/or edit number, page number, file name, date of proof performance, control strip UGRA/FOGRA.
- The lack of a proof description and/or control strip will affect the possibility of using the proof as a color pattern for printing.

- In the absence of a contract proof for the work for which the color reproduction quality is particularly important, a proof made by TAKT **at the expense** of the customer can be used.
- The proof should be made of the final files provided to TAKT after the last revision.
- It is recommended that the proof prepared by TAKT is approved.
- Should the client not provide TAKT with its own contract proof and/or not require the acceptance of the proof performed by TAKT, the print will be made according to ISO 12647:2.
- In the case of the acceptance of a print by the Client, the control sheet which has been accepted and signed by the customer becomes a master material for the operator of the printing machine.
- Prints from previous editions are not contract proofs, they can only be a reference point for the operator of the printing machine.
- In the case of additional printing finishes, TAKT reserves the possibility of color differences in relation to produced proofs.

Keep in mind that

- glossy foil and UV varnish minimally "draw color" in the direction of Yellow.
- foil matt and matt UV varnish "draw color".

8. GENERAL CONDITIONS

- TAKT is entitled to refuse the acceptance of files not made in accordance with the specification.
- TAKT is not responsible for the correctness of files prepared out of compliance with the above recommendations transferred to printing forms or files containing objects derived directly or indirectly from CorelDraw, AutoCad, etc
- Any additional work on client's materials for the purpose of compliance with specifications may be considered as an additional service of TAKT and will be charged extra.
- Information regarding the use of machine varnish should be included in an order specification. The lack of machine varnish may cause smudges. Therefore applying it will make the surface more rub resistant.
- The date of providing TAKT with the initial materials shall be considered the date of providing TAKT with the materials which do not request any additional treatments, corrections and/or acceptances.
- Each purchase order will be joined with the full specification.
- The colors of the finished product should be as close as possible to the color supplied by the client's properly made contract proof, taking into account the specificity of offset print, paper quality, proof profile and other factors affecting the color prints.
- The supply is deemed compliant with the order when at least 99% of the product has quality parameters within the scope of tolerance permissible by quality specification in Annex No. 1