

Technical Guidelines for Artwork Files

1. DIE-LINE

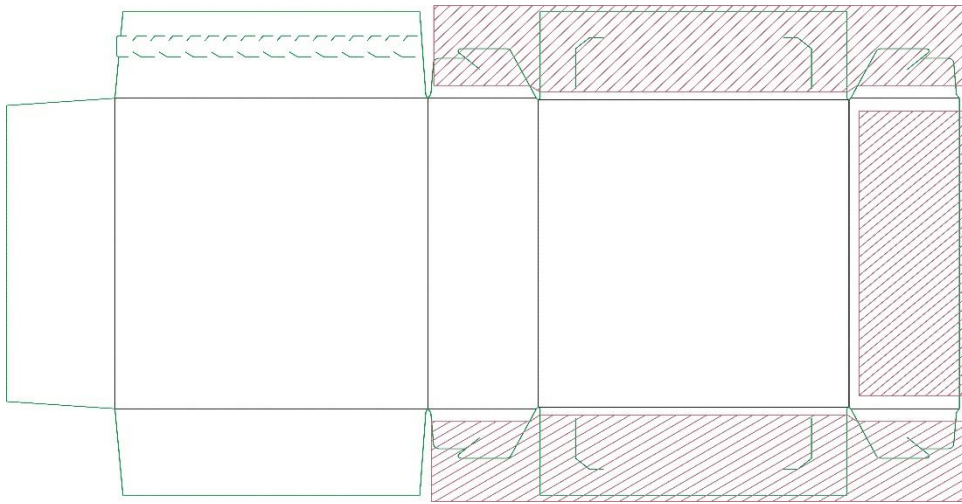
To guarantee optimal processing of your artwork files, the artwork has to be aligned to the die-line. Therefore, the die-line data have to be requested from us prior creating the artwork files.

The die-line has to be put on a separate layer called "die-line" with a separate full tone color called "outline".

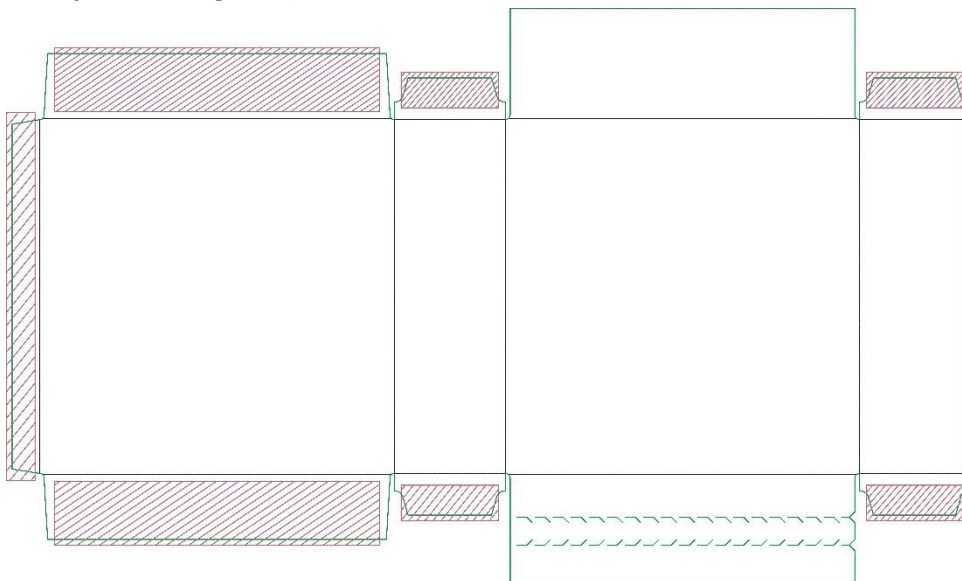
We can provide the die-line data in following file formats: **cf2, eps, dxf** or **pdf**.

The bleed (artwork overlap) has to be at least 5 mm.

Example 1 Cardboard box blank (red shaded area = color and varnish free)



Example 2 Folding box (red shaded area = color and varnish free)



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2. TEXT AND IMAGES

2.1 SAFE AREA

To avoid interference between artwork and *die-cutting and creasing lines*, the *text and images* have to be kept at least 3 mm away from those lines.

2.2 FONT SIZE AND LINE THICKNESS

Minimum point size	positive	6 pt
Minimum point size	negative	6 pt
Minimum line thickn.	positive	0,10 mm
Minimum line thickn.	negative	0,15 mm

3. Artwork files

3.1 Data transfer

New artwork files can be transferred to us via email or weblink. In case of questions, please contact your dedicated customer representative.

3.2 FILE FORMATS

3.2.1 Print-ready data/Closed data (PDF)

Closed data need to be provided as print-ready PDF files version X4 or 1.4.

To guarantee a smooth and standardized data exchange, PDF files of version X4 need to be provided. As X4 files tolerate RGB data, we kindly ask you to ensure, that your artwork files don't contain any RGB data.

During processing of artwork files in programs like Adobe Reader or Adobe Acrobat, the option „overprint“ has to be activated.

Fonts have to be either embedded into the PDF files or to be converted to outlines. In case of embedded fonts licenses and rights of use have to be taken into account.

Note Upon request, we provide our individual job options for the creation of PDF files.

3.2.2 Open data

Artwork files with open data can be provided in following file formats:

File format	preferred version	min. version
ArtPro (.art)	all	all
Adobe Photoshop (.psd)	Creative Cloud (CC)	Creative Suite (CS)
Adobe Illustrator (.ai)	Creative Cloud (CC)	Creative Suite (CS)
Adobe InDesign (.ind)	Creative Cloud (CC)	Creative Suite (CS)

Fonts have to be either converted to outlines or to be delivered along with the files. In both cases licenses and rights of use have to be taken into account.

Software specific effects such as underlines, shades, borders and others must not be used.

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3.3 COLOR SETUP

The artwork files have to contain relevant colors, only. Colors not in use or colors automatically created by the artwork program have to be deleted.

Permitted color spaces and systems are Pantone, HKS and CMYK according to ISO 12647.

Other color spaces and systems can be used after consulting WS Quack + Fischer.

Colors have to be named after their specific denomination, e.g. Pantone reference number or CMYK. Text colors have to be set up in a single color (either CMYK or spot color).

The selection of the color system will be made in accordance to the substrate. As a consequence color systems like Pantone C (coated) and Pantone U (uncoated) must not be mixed in the artwork.

Process and spot colors have to be set up as such in the artwork.

RGB colors are not permitted.

In order to prevent printing of unwanted colors, the number of colors has to be checked by the artwork designer using color separation. Hidden or unwanted colors have to be deleted.

3.4 FINISHING / VARNISHES / EMBOSSING

Finishing colors, varnishes and embossing have to be set up as separate full tone colors (non-printing) with a unique denomination.

3.5 TRAPPING OF COLORS AND VARNISHES

The trapping of varnishes has to be set to at least 0,5 mm.

The trapping of two colors has to be set up in a way that the brighter color overlaps the darker color with at least 0,05 mm.

Please, always request the exact trapping values for each artwork from us.

3.6 IMAGE RESOLUTION AND IMAGE FILE FORMATS

Half tone images need to have a minimum resolution of 300 dpi at 100%.

In general, only high-resolution images in file formats TIFF and PSD are accepted.

3.7 TRANSPARENCIES

All current layout programs are capable of creating transparencies in artwork files.

In case your artwork contains transparencies, make sure those transparencies are kept native (e.g. by using PDF X4) before transferring the file to us.

3.8 BARCODES

Barcodes have to be created in full scale (1:1). The requirements on readability (such as contrast, rest area) have to be met. The EAN code field has to be an opaque (full tone) or print-free area (e.g. plain white or nuances of white such as bright beige). The size of the code field has to meet the desired size of the bar code (e.g. EAN 13 size SC2). We refer to GS1 Germany GmbH's recommendations on bar code quality.

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The readability of the barcode has to be checked. In case print-ready artwork files have to be reworked due to defective barcodes, the creator of the artwork files is liable.

The most advantageous readability of barcodes can be achieved at a size of SC2 (100%) and black or blue (cyan) line colors. Codes in shades of blue or green might have a restricted readability. Codes in shades of red or yellow cannot be accepted.

The readability is tested according to ISO 15146/15420 and against acceptance level 2,5 (B). Additional parameters can be evaluated upon request.

3.9 DIGIMARC

Artwork files containing Digimarc data have to be delivered in print-ready versions. WS Quack + Fischer takes no responsibility for the readability and accuracy of the Digimarc files.

Changes or corrections to the Digimarc files have to be done by the original editor.

3.10 CAPTION FIELD

Each artwork has to contain a caption field providing below information. The field has to be located outside the artwork and die-line.

- Customer name
- Item / item no.
- Packaging size / name of die-line
- Colors, varnishes and others
- Date and name and email address of editor

4. DIGITAL PROOF

For reasons of color matching proofs are essential. However, as digital proofs are generally not screened, they do not reflect any possible visual changes (e.g. of color gradients) caused by the screening process. Moreover, spot colors can only be simulated by using the process colors CMYK limiting the color space.

Accordingly, spot colors cannot be held liable in a proof, and only a press proof made according to ProzessStandard Offset (PSO) can show the final result.

The CMYK part of a digital proof has to be generated according to PSO. In case of questions, we highly recommend to get in touch with us.

Each proof has to carry a color test report (Delta E values) and a standardized media wedge.

In addition, color samples from formula guides (Pantone, HKS etc.) can be attached.