## miscellaneous tips & tricks
# general information for the best quality and fewest problems

## FILE PREPARATION

- Use a professional page layout program such as Quark Xpress or Adobe InDesign. These programs are designed for output to film or plates.

- Always PLACE or LINK your images in your layout file, never "copy/paste" them (this is different than placing a graphic into a layout and then copying it within the same document).

- Use the "package" or "collect" command in your page layout program to gather all fonts and graphic files. With a few simple clicks you can collect your layout file, fonts and hi-res links into a single folder to send to your printer or service bureau (that would be us). It makes everything go smoothly when all the necessary files are in one place.

- Unwanted text or graphic items in your layout should be deleted – not covered by white or "paper" colored boxes.

- Unused colors should be removed from the color list.

### More about Linked Graphics

When you import graphics into your page layout program using the "place" or the "import" command, all of the encoding becomes a part of the file and the graphic can be printed in high resolution. Some programs "embed" the image (the program stores a full copy of the graphic in the encoding for the document) and some "link" to the image (the program puts a reference to the original graphic in the document encoding). In either case, you should send the original graphic files when you send native layout files.

## PDF FILES

When saving a job as a PDF for output, embed your fonts or include them with your job. Keep compression to a minimum – save with a maximum quality setting. If possible, preflight your PDF or view it on a different computer (one that does not have access to images and fonts you used) to make sure that all pages, fonts and images appear correctly.

## MISCELLANEOUS

- Line copy should be no less than 6-pt. A sans serif medium font works best at smaller sizes.

- Fine lines, small text and rules should be restricted to black or pms colors rather than cmyk builds if possible.

- The use of "hairline" rules should be avoided, make the rules at least .25 pt.

## FONTS

Fonts are the cause of some of the most persistent problems in imaging electronic files.

- Avoid using the "style" commands in your layout file to make fonts bold or italic. You should use the actual bold or italic font. What this means is: when you are typing along, and you want something to appear bold or italic, don't click the "B" or "I" button – go to your font menu and choose the bold or italic version of the font.

- When sending your files, you must include a copy of the fonts you have used in your document in order for your job to look like you want it to. Remember that you will need to send both the screen font (usually in a "suitcase") and the printer font for postscript fonts. The fonts used to output your files must be of the same version, name and manufacturer as you used to create them.

- Not providing fonts with the job can delay it or force us to substitute a similar font, which may cause your document to reflow.

## IMAGES & GRAPHIC ELEMENTS

- Make sure your images are at least 300dpi at the size they are being used in your layout file. Otherwise, they will begin to lose definition and appear "bitmapped" or jagged.

- If your job is to be printed in color, make sure that the images you use are in the correct "color space" – for print that generally means CMYK or Spot. [Learn more about color space on the next page.]

- 8-bit (grayscale) and 24-bit (color) scans should have an effective resolution between 225-300 dpi.

- Linework scans should have a minimum effective resolution of 600 dpi.

- Color scans should have a maximum density of 300%, and a maximum black of 85%.

- Images should be scanned as close to 100% of final size as possible.

- Save black-only images as grayscale – if they are left as RGB they will not separate properly.

- Avoid using GIF, PICT or BMP images. These are usually low resolution, RGB images.

- We highly recommend that you get a contract proof of your process color jobs.

## What difference does "Color Space" make?

There is a difference in the **kind** of color you see on your monitor and the color you see in a printed piece. In order for a job to print you need to be able to separate the colors correctly. Simply put, color separations print out the different colors – whether CMYK or Spot PMS colors – on separate sheets so that the job can be printed. If you are working in the wrong color space you may not get the separations needed to print the colors correctly.

### RGB

This is the color space that your computer monitor uses. Colors are "created" using Red, Green and Blue light channels. Color televisions, computer monitors, multimedia presentations and the web are where you would see or use this color space. There are many colors that can be seen on a monitor that simply cannot be printed using ink.

### CMYK

The color space needed for print is known as CMYK: **C**yan, **M**agenta, **Y**ellow and Blac**k** inks are printed in layers to create the full color you see in print.

- if you are printing a job in CMYK (also referred to as "full color" or "four-color process") your graphics and photos need to be CMYK, not RGB. Converting RGB, LAB and Index images to CMYK through our RIP system may cause an undesirable color shift as the profile embedded in the program is not one we can customize – what you see may <u>not</u> be what you get if the color conversion is not done prior to file submission.

### SPOT COLORS

Spot colors are colors that are intended to print as a solid ink rather than a composite of CMYK. For example, instead of printing a business card in full color using four plates, I may choose to print it in two spot colors (two plates).

The Pantone Matching System (PMS) is the industry standard for spot color inks. The printer would mix the spot color inks using a formula or purchase them premixed.

- if you are printing a job that has SPOT colors, do not use RGB or CMYK images – they will not separate into spot colors.

**Duotones,** Tritones or Quadtones are two-, three-, or four-color images created with overprinting spot colors (most usually black + PMS); and Grayscale is a black and white image using 256 shades of gray (screen values of black) – all of these color spaces are used for print.

**It is very important when using spot color or duotone images to place into a document that you make sure that the color builds and the name of the colors are exactly the same in both your image and your document or the separations may not print correctly.**

**Pantone colors** are generally available in two versions within your page layout or graphics program: C - designed to simulate the ink on a coated sheet, and U - designed to simulate the ink on an uncoated sheet. To illustrate, objects created as PMS Violet C will print and separate as a different color than objects created or named as PMS Violet U. Further, different programs interpret colors in different ways – if you convert PMS Violet U to cmyk in Quark Xpress 9, it will revert to the cmyk values for PMS Violet C and print much differently than it would from InDesign or Illustrator.

PMS Violet C
Color build (CMYK values):
Illustrator: C 89.26  M 100  Y 1.18  K 2.5
Photoshop: C 90  M 100  Y 1  K 2
Quark:  C 92  M 98  Y 0  K 0

PMS Violet U
Color build (CMYK values):
Illustrator: C 61.33  M 74.26  Y 0  K 0
Photoshop: C 62  M 74  Y 0  K 0
Quark:  C 92  M 98  Y 0  K 0

### CMYK vs PMS

If your spot color is critical, you may choose to print your job in 5-colors . . . using cmyk to print photos, and adding a spot color for a solid band or logo. The reason? Some PMS colors can't be made using only C-M-Y-K inks.

For example, let's say your corporate indentity guide calls for your logo to be printed in PMS 2736 C. If you want to print a brochure in full color, you will find that the color build using CMYK inks is very different than the solid PMS ink, so you may choose to print the logo as a separate color.

PMS 2736 C
as a solid PMS color

PMS 2736 C
as a CMYK build
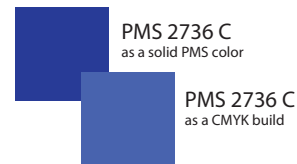
### Still confused? . . .

If you need further help – whether it be having questions answered, assistance setting up your file or having your file preflighted, color corrected or "fixed" – twe're here for you!

Contact us at