

Printing Terms Glossary

Bindery Operations after the paper is printed on including cutting, folding, trimming, collating, stitching, tabbing, wrapping, etc.

Bitmap A computerized image made up of dots or pixels. Line art and photos are often saved as bitmaps. To keep art work from looking jagged, bitmaps should be saved at a minimum of 1200 dots per inch (dpi).

CMYK Printers use CMYK - representing the colours cyan (a light blue), magenta (a pinkish purple), yellow, and black inks - when printing 4-colour process work. These are called subtractive colours, as combining them all gives the colour black. Subtracting one or more of these colours will yield any other colour. When combined in various percentages, these four inks will create an entire spectrum of colours, including those used in colour photographs.

Corel Draw This is a popular drawing program for the Windows market. We don't support Corel Draw specifically but can usually import its files into Macromedia FreeHand or Adobe Illustrator if needed. Saving your drawings as an EPS (Encapsulated Postscript) file with all the type converted to graphics is another way we can accept this format.

Duotone Colour reproduction from a monochrome original, such as a black and white photograph. Two halftones with different screen angles are made from the same original and printed in register with two colours.

Dynamic Range The range of tones from lightest to darkest a scanner can see and resolve.

EPS (Encapsulated PostScript) A computer graphics file format developed by Adobe Systems that usually contains object-oriented files.

File Transfer Program (FTP) File Transfer Protocol, or FTP, allows computers to speak to each other. FTP is used to make files available for transfer over the Internet. Anyone with access to the internet can use FTP. In some cases you may need network access and/or username and password information. The primary benefit of FTP, as opposed to E-Mail, is the size/speed at which files can be sent and received.

FreeHand A professional graphics program produced by Macromedia. FreeHand is used for graphic design work such as logos and drawings. We can print directly from FreeHand or export the graphics to PageMaker or QuarkXPress.

Kern The adjustment of the spacing between letters in order to make them more visually pleasing and balanced on the sheet.

Knockout When type or line art is printed over a photo or coloured background, the best way to produce a consistent colour is to reverse the type or artwork out of the background and then drop in the desired colour. This process is referred to as knocking out.

Leading The space between lines of type, measured from the baseline of one line to the baseline of the next. The quantity is measured in points, such as 6 point type, 8 point, etc. Each point equals approximately 1/72th of an inch.

Lines per Inch (LPI) Halftone screens are measured in lpi. Newspapers print photos at 65 to 85 lpi producing coarse looking screens. Our normal printing process used 133 to 150 line screens. The industry rule of thumb is to scan your photos at two times the lpi they are going to be printed at. This means for best quality, we scan our photos at 250-300 dpi. Any higher dpi than twice the lpi will just increase the file size with very little effect on the quality of the image.

Object-oriented graphics or vector graphics. Used for line drawings, logos, and other images that require smooth edges. Made up of mathematically defined curves and line segments called vectors. Beneficial in printing due to ability to be enlarged without loss of detail.

OCR (Optical Character Recognition) Software that translates images of letters entered into the computer with a scanner into characters that can be manipulated as text but not as images.

Paper printing terms

Bond Paper Paper used for printing, writing, or typewriting. It may contain all chemical wood pulp or 25%, 50% or 100% rag pulp. Several grades are available, and the best are usually watermarked.

Brightness The ability of a paper to reflect light. Brightness of paper is expressed as a percentage that is obtained by comparing the paper to be tested with a sample paper, called a "calibration sample".

Coated Paper Paper with a layer of coating applied to one or both sides, such as gloss, dull and matte finish. Due to decreased dot gain, coated papers provide sharper images and are used frequently in 4 colour process work as well as in black and white halftones.

Cotton Fiber Content Paper containing some percentage of cotton fiber, generally either 25%, 50%, or 100%.

Gloss A shiny coating on paper. Gloss coatings allow very little ink absorption, providing excellent colour definition and contrast.

Grain In paper Grain is the direction in which most wood pulp fibers lie within the sheet as the paper is made. Folding paper against the grain breaks more wood fibers than folding with the grain, resulting in an uneven, less precise fold.

Grain Direction In paper, the predominant alignment of fibers corresponding to the direction in which the paper flows on the paper making machine. Grain direction is often important if the paper has to be folded after it is printed. Folding across the grain can result in cracking.

Matte A coated paper finish that isn't shiny like a gloss, but still keeps much of the ink from being absorbed by the paper and provides an excellent image.

Opacity The quality of being impenetrable by liquids or light. With printing paper it is the ability to keep photos and print from showing through to the other side.

Paper sizes

A SERIES PAPER SIZES

A0 1189mm x 841mm
A1 841mm x 594mm
A2 594mm x 420mm
A3 420mm x 297mm
A4 297mm x 210mm
A5 210mm x 148mm
A6 148mm x 105mm

B SERIES PAPER SIZES

B0 1414mm x 1000mm
B1 1000mm x 707mm
B2 707mm x 500mm
B3 500mm x 353mm
B4 353mm x 250mm
B5 250mm x 176mm
B6 176mm x 125mm

Per 'M' A reference for "per thousand". "M" is the roman numeral for the quantity of 1000.

Pulp A mixture of wood and/or cotton fibers, chemicals and water which paper mills use to make paper.

Ream Five hundred sheets of paper. A ream is often confused with a package of paper which is incorrect. Paper is sometimes packaged in quantities of 250 as well as 500 sheets.

Text/Writing Papers A general term used to describe paper with fine or specialty textures that is used for printing. Usually made from chemical wood pulp, sometimes with cotton fiber content. Often writing grade papers will feature a "watermark".

Uncoated Paper Paper that has not had a final coating applied for smoothness. Uncoated paper is absorbent and soft in appearance.

Watermark A design, or symbol impressed in paper while it is being formed on the wet end of the paper making machine. When the paper is held up to the light, the watermark appears as a lighter area than the rest of the paper.

Perfect Binding A binding process whereby single sheets are stacked together, the binding edge is ground to create a rough surface, and adhesive is applied. A cover is then wrapped around the pages.

Photo CD The system developed by Kodak for storing the images obtained through a digital camera onto a compact disc.

Photoshop Adobe's premier photo manipulation program. Photoshop is used to colour correct and sharpen scans to make great looking reproductions of not-so-great looking photographs. After the photo is adjusted (or created) it is then imported into PageMaker or QuarkXPress. Many of the graphics, logos and photos on this Web site were created or modified in Photoshop.

Pica A unit of measure equal to 12 points or one sixth of an inch.

Pixel Short for picture element. These are the dots that form the picture on a monitor. The smaller the pixel, the more detailed the picture.

Pixel Depth The amount of data used to describe the coloured dots on a computer monitor.

PMS (Pantone Matching System) This is a system of colour formulas where we can reproduce over 1000 different shades and colours by accurately mixing several "standard" inks. We can print any colour listed in the Pantone Matching System so that you will get the exact colour you want.

Point In measuring type, 1 point is 1/12 of a pica or 1/72 of an inch. In measuring heavy paper stock, 1 point is equivalent to 1/1000 of an inch. Thus 10 point stock is 10/1000 of an inch, or 0.010 inches thick.

Postscript A page description language for medium to high resolution printing devices. Since Postscript images are made up of mathematical calculations, they can be resized and still maintain their quality unlike bitmap images.

Preflight In digital prepress, the test used to evaluate or analyze every component needed to produce a printing job. Preflight confirms the type of disk being submitted, the colour gamut, colour breaks, and any art required (illustrations, photographs, etc.) plus layout files, screen fonts, printer fonts, EPS or TIFF files, laser proofs, page sizes, print driver, crop marks, etc..

PrePress The processes performed on a printing order prior to its going to the press to be printed. Examples are typesetting, layout, scanning, etc.

Printing Plate A thin object (plate) made of either metal or paper which is light sensitive and causes an image to be transferred to paper while on a printing press. The image is burned onto the plate by the use of high intensity light. The surface of the plate is treated or configured so that only the printing image is receptive to the ink which transfers to the printed object.

Proof A method of checking for errors prior to printing an order. Normally the last prepress operation. A press proof is used by the printing press operator to ensure the correctness of the finished product during the production of the order.

Process Colour One of the four colours (cyan, magenta, yellow, and black) that is used in producing full-colour images, such as colour photographs.

Publisher A software package produced by Microsoft for simple office and home publishing. Publisher prints great to colour ink jet printers, but until Publisher 2000 lacked the professional colour separation capabilities of PageMaker and QuarkXPress. Using Publisher 2000 we can perform colour separations from your Publisher files; note, however, that there might be slight changes in files created with earlier versions of Publisher.

QuarkXPress A professional quality desktop publishing program. It is the program of choice for many designers and advertising agencies. All our prepress operators have had many years of experience with this program.

Raster Image Processor (RIP) The process of interpreting a page description language, such as Postscript, to a raster format at the resolution and in the format required for a printer or imagesetter. May also refer to the hardware and/or software used in the process of ripping a file.

Registration In printing, the fitting of two or more colours or images in alignment with each other. Hairline register is the fitting of two or more colours in exact alignment with each other.

Registration Marks Marks outside the printing area that help us make sure colours are lined up or "registered" together.

Resolution The degree of image sharpness that can be reproduced by a piece of equipment. Resolution is measured in dots per inch (dpi). Most laser printers image at 600 dpi.

Reverse Type or other image reproduced by printing the background rather than the image itself, allowing the paper or underlying ink to show the shape of the image.

RGB Red, green and blue These are the primary colours which make white light. For printing, secondary colours (cyan, magenta and yellow) are used to simulate the colours required. Black (K) is added to help CMY reproduce rich blacks and shadows. When preparing colour files for output, please ensure that all placed graphics and colours are separated for four-colour CMYK and not RGB.

Saddle Stitching A binding method where multiple folded sheets are stapled at the center (the spine). Booklets, magazines and manuals are some of the projects which get saddle stitched.

Sans Serif Literally, without serif(s), which are the extra projections from the main stroke of letters found in some type faces. Helvetica and Arial are sans serif typefaces.

Score (or crease) To press a channel into paper to facilitate folding and prevent cracking. Particularly important with toner based printing which cracks more easily than ink based printing.

Script A kind of type face that mimics handwriting.

Serif An extra projection from the main stroke of letters in certain type faces. Times is a serif typeface.

Sheet-fed Press A press that prints single sheets of paper, as opposed to a web press. Our presses are all sheet fed.

Spot Colour A single colour ink or varnish applied to printed material. Primarily used when process colours are not appropriate. The effective use of spot colour can add heightened interest to printed materials without incurring the cost of process colours.

Spread When a publication is printed with several interacting spot colours, gaps or colour shifts may appear between objects. A spread closes the gap by overlapping a light foreground object to a dark background. See also 'Trapping'.

Style Sheet Instructions for the layout of a document, such as the type faces to be used, point size of headers, placement of footers, etc., in order to maintain consistency throughout the document.

Tint A lightened spot or process colour created by printing smaller halftone dots of the base colour. This is also referred to as screening the colour.

TIFF A graphics file that is commonly used in printing for photographs and illustrations needing high resolution.

Trapping The deliberate overlap of adjacent colours to minimize the effects of misregistration of printed materials.

Varnish A coating added on top of paper to serve as protection, add a finish, or add a tinge of colour. Varnishes are very effective in adding emphasis or eye-appeal to printed material.

Web Press A high run, fast speed printing press that uses rolls of paper rather than individual sheets.

