

PRE-PRESS TERMINOLOGY

ALIASING:

Jagged edges on curves and diagonal lines in a bitmap image.

ALPHA CHANNEL:

Used to store selections (masks) or transparency information in an image program.

ANTI-ALIASING:

Process of smoothing out the jagged edges on curves or diagonal lines. Often applies to type.

BANDING:

Undesirable, abrupt, color breaks in a smooth gradation or color vignette.

BITMAP:

Image comprised of pixels in a grid with each pixel being either black or white with no shades of gray. Many image types are bitmap-based including JPEGs and TIFFs. Bitmap (BMP) is also a graphic format.

BLEED:

Image or color that extends off the edge of a page. Electronic files are set up so the inks print at least 1/8" over the edge and the excess is later trimmed.

CHOKER:

One aspect of trapping.

CLIPPING PATH:

Vector-based outline used to "clip" an image from its surroundings without altering the image itself. Images with clipping paths should be saved as EPS files.

CMYK:

Cyan, Magenta, Yellow, Black—the 4 ink colors normally used for process color printing on a press.

COLOR CORRECTION: Adjusting color in a scanned image so that it more closely matches the original image, or to compensate for flaws in the original image.

COMPOSITE:

Image or page that is printed in color, rather than being printed as separations.

CROP:

Blocking out part of an image through placement in a page layout program.

CTP:

Computer To Plate. System where printing plates are generated directly from a computer file bypassing the traditional step of creating film first.

DENSITOMETER:

Device used to verify the ink density laid down by the press.

D-MAX:

The total percentages of inks printing on a certain area.

DIGITAL PROOF:

Produced to simulate the behavior and color of a printing press without using film.

DOT GAIN:

Darkening of an image caused when ink is absorbed by paper, typically greater on uncoated paper than on coated.

DOWNSAMPLE:

Digital size reduction of an image.

DUO-TONE:

Image printed in two different ink colors.

DYNAMIC RANGE:

The total range of tones in an image, from lightest to darkest.

EPS:

Encapsulated Postscript. File format for images or graphics.

FONT:

Alphabet of letters in a particular style. While the term used to refer only to a particular style of type in a particular size, it now refers to the entire collection of letters of a particular style in any size. "Font" and "typeface" are used interchangeably.

FONT FAMILY:

Collection of alphabets in a similar style but indifferent weights or classifications.

FPO:

For Position Only.

GAMUT:

The overall range of colors that can be produced by a particular color model i.e. RGB, CMYK, or Lab. Colors that are impossible to reproduce in a particular color model are said to be "Out of gamut."

GRADIENT:

Blend from one color to another color.

HALFTONE:

Pattern of dots used to simulate shades of gray or levels of color on a printing press. Dot shape can vary from round to square, though ellipses are most common. To reproduce color on a printing press, a halftone screen is created for each ink color and the halftones are printed on top of each other in a "rosette" pattern.

HI-RES, HI-REZ:

High-resolution image.

HISTOGRAM:

Graph showing the relative distribution of pixels of various densities in an image.

ILLEGAL ATTRIBUTE:

Font characteristic—such as bold or italic—created through a page-layout program rather than through actual font selection. Often, these attributes don't translate to plate or film.

IMPOSITION:

The arrangement of pages on a printed sheet which will place the pages in their correct order after the sheet is printed on both sides, folded and trimmed.

INTERPOLATION:

Digital guessing. The process used by image software to fill in missing information (based on the surrounding pixels) when an image is up sized or manipulated.

JPEG: Joint Photographic Experts Group. "Lossy" form of image compression suitable images used on the Web.

KERNING:

Adjustment of the space between two letters in a piece of text. Tight kern. Loose kern.

LAB:

Color model that mathematically describes every color. Formally known as CIE Lab.

LAYOUT:

Assemblage of words, images and other elements to form a finished piece.

LEADING:

The line space, or white space, between lines of copy measured in points.

LINE SCREEN:

Measure of the distance between the rows of dots in a printed halftone, usually expressed in lines per inch. Typically, newspapers are printed at 85 lpi, color magazines at 133 lpi, and other high-quality color publications at 150 or 175 lpi — or more. The higher the number, the greater the resolution.

LIVE AREA:

The area on a page where you can safely place body copy or other vital elements without risk of it being trimmed off.

LOW-RES, LO-REZ:

Low-resolution image.

MASK:

Object or alpha channel used to block out part of an image.

MID-TONE:

The areas of an image which print close to 50% gray or 50% color.

MOIRÉ:

Normally undesirable wavy pattern caused when two different repeating patterns (such as two screens) overlap each other. Moirés can occur when the pattern in an image interferes with the screen pattern or when an image's screen angles are incorrect.

MULTIPLE MASTER:

Special type of font that can be varied on more than one axis.

OPI:

Open Press Interface. System which automatically creates a low resolution version of an image to use in page layout while storing the high-resolution version on the same server. The software automatically places the high-res version in the final piece before going to plate.

OPTICAL RESOLUTION:

The maximum resolution at which an image can be scanned without interpolation—digital guessing.

OUT OF GAMUT:

Colors that are impossible to reproduce in a particular color model.

OUTLINE FONT:

Also called a printer font, it's the font file that allows a font to be printed at any size without jagged edges on the curves and diagonals. Often, it's a separate font file and must be included with the files you provide to the service bureau or pre-press department to get your fonts to appear correctly.

OVERPRINT:

To print one ink directly on top of another ink.

PAGE LAYOUT:

The all-inclusive process of assembling text, graphics and other elements into a finished page. Common page layout programs include QuarkXPress and InDesign.

PANTONE™:

Pantone Matching System — PMS. Very common system used to specify colors of ink with a number that is universally understood by software, printers, other designers, ink houses and clients.

PDF:

Portable Document Format. File format created by Adobe Systems to facilitate cross-platform viewing of documents in their original form. Due to its ease of handling graphics and fonts, PDF is the fastest growing file format for offset printing.

PIXEL:

The smallest unit of a raster graphic. Derived from the words “Picture Element.”

PLATE SETTER:

Special type of image setter that prints directly onto printing plates instead of film.

POINT:

Unit of measurement commonly used to specify type sizes. There are 12 points in a pica and 72 points in an inch.

POSTSCRIPT:

Standard for communication between high-end page layout programs and a desktop printer. Invented by Adobe.

POSTSCRIPT FONT:

Standard font format for outline (printer) fonts which can be used on multiple platforms.

PRINTER'S SPREAD:

Two facing pages in the order they will be printed, e.g. pages 1 and 4 and also 2 and 3 will be printed together for a four-page brochure.

PROCESS COLORS:

CMYK — Cyan, Magenta, Yellow and Black. The ink colors typically associated with color offset printing.

PROOF:

Designed to simulate, as closely as possible, the exact appearance a job will take when printed on press.

QUAD-TONE:

Image treated the same way as a duo-tone, but with four ink colors instead of two.

RASTER GRAPHIC:

Computer image made up of small particles or pixels.

READER'S SPREADS:

Pages arranged in the order they need to be in for reading. While projects may be designed in reader's spreads, imposition software converts the document to printers spreads before going to plate. The printed document is assembled, bound and trimmed back into reader's spreads.

RE-SAMPLE:

Any digital resizing including upsample and downsample.

RESOLUTION:

Measure of the level of detail in a raster graphic measured in ppi — pixels per inch — but often referred to as dpi. The higher the resolution number, the greater the detail.

RGB:

Red, green and blue — the additive primaries used in video monitors. These are not printing colors.

RICH BLACK:

Black color that is made by mixing other colors of ink with black ink. Rich black formulas may be two colors, such as 40% cyan and 100% black or four ink colors such as 20% cyan, 20% magenta, 20% yellow and 100% black.

RIP:

Raster Image Processor. Device that is designed to interpret PostScript files and create an image suitable for printing.

ROSETTE:

The desirable minute circle of dots that is formed when two or more process color screens are overprinted at their appropriate angle, screen ruling and dot shape.

SANS SERIF:

Classification of typefaces whose letters lack the flared elements on the ends of each segment of the individual letters.

SCATTER PROOF:

Random placement of images on a proof to spot check for densities and color balance before going to plate.

SCREEN ANGLES:

Angles at which the halftone screens are placed with relation to one another to avoid undesirable moiré pattern. The most common angles are black 45°, magenta 75°, yellow 90°, and cyan 105°. Don't mess with screen angles in your page layout application. Let your printer do it for you.

SEPARATION:

The process of converting an image to CMYK for printing plates.

SEPARATIONS:

Individual sheets of film or plates. Each sheet of film or plate is for one ink color on press.

SERIF:

Classification of typefaces whose letters have flared elements on the ends of each segment on each individual letter.

SPOT COLOR:

Specific color, normally identified by a Pantone™ number, that is used in printing in addition to the process colors of CMYK.

SPREAD:

Two facing pages — either a reader's spread or a printer's spread.

STOCHASTIC:

Special type of printing which uses a random pattern of very small dots distributed at different densities to reproduce a continuous tone image.

SWOP:

Standard Web Offset Proofing. A defined color proofing standard.

TIFF:

Tagged Image File Format. Raster file format used for image placement in page layout programs. TIFFs may be tinted and modified in a page layout program — such as Quark — where EPS images cannot.

TOTAL INK:

The total percentages of inks printing on a certain area.

TRAP:

The art and science of adjusting images for printing so inks printed next to each other, or overlapping each other, will print correctly.

TRIM:

The cutting of the finished product to the correct size. Marks are printed on the sheet to show where the trim is to be made.

TRI-TONE:

Image printed in three ink colors, just as a duo-tone is printed with two.

TRUETYPE:

Standard format for fonts consisting of a single file; there are no separate outline fonts.

UPSAMPLE:

Digitally increasing the size or resolution of an image.

VECTOR GRAPHIC:

Graphic that uses mathematical calculations to describe lines and curves rather than pixels. It is often created in a drawing program and is used for logos, line art, or text but not photos. Vector images have unlimited scaling options.

VIGNETTE:

Image edge that has been modified to softly fade into the background.

WEB PRESS:

High-speed printing press, typically used for high-volume runs, which prints on a continuous roll of paper.