



sm@rt Desktop Publishing Glossary

A

Accent

A means of defining the sound of a character. Commonly occurring accents are:

- ' acute
- ` grave
- ^ circumflex
- ¨ umlaut
- ~ tilde
- ° ring

Airbrush

Pen-shaped ink sprayer used to retouch photographic prints and create illustrations.

Anti-aliasing

A software implemented technique used to compensate for the inaccuracies caused by digitizing subtle geometric shapes onto a fixed rectangular grid.

Ampersand

A symbol for "and" commonly used in titles, e.g., Smith & Co.

Antique

Typefaces having "old face" letter forms, e.g., Times.

Ascender

The parts of some lower case characters, such as *b*, *d*, or *h*, which rise above the x-height or baseline.

Ascender line

An imaginary line running along the tops of ascenders.

ASCII

Pronounced As-key. American Standard Code for Information Interchange. Defines the common keyboard characters.

Artwork

Any black and white or color original prepared for reproduction. Also called mechanicals.

B

Banner

In newspaper work, a main headline running across the top of the page. Often used more loosely for the title heading on a journal or newspaper.

Base line

(Type) The line on which both capitals (H) and lower case (x) letters stand.

Baseline alignment

The normal method used by typesetters for aligning type.

Benday screen

A proprietary screened tint for use in producing camera-ready artwork; also alternate term for screen tint.

Bezier curves

The name of the curves making up the outline of a character in PostScript format.

Bit map

A digital representation of an image in which the sense of each binary bit indicates whether the corresponding point of the image is black, white or a color.

Black letter

A group of typefaces evolved from the broad-nip penstyle of gothic lettering used by scribes. Also known as Old English.

Blanket

Thick rubber sheet that transfers ink from plate to paper on an offset press.

Bleed

The area of illustrations, solids or rules that extends beyond the trimmed edge of a printed page and the extra width added to artwork to make bleeding possible.

Blueline

(Prepress) Photographic proof where all colors show as blue image on white paper.

Body text

An area, or column of type, usually in size range of 5-14 point.

Body type

The main text of a document, as distinct from the headings; also called body copy.

Boldface (bold)

The relative blackness of a typeface where strokes of the character have been thickened, e.g., Helvetica bold.

Bounding box

The outside perimeter of any selected art element or ad layout.

Brightness

Characteristic of paper referring to how much light is reflected (printing). Refers to the balance of light and dark grays within an image.

Brush script

A group of typefaces having the appearance of free-hand writing with a brush.

Burn

(Photography) To give extra exposure to a specific area of a print; (lithography) to expose a blueline proof or printing plate with light.

C

Camera-ready copy

Mechanicals, photographs, and art fully prepared to be photographed for plate making according to the technical requirements of the printing or decorating process.

Cap height

Contraction for capital height. The height of capital letters.

Caps

Contraction for capitals.

Case fraction

Small fractions designed as a single unit. Also known as solid fractions. They may also be available as horizontal fractions.

CCD scanner

CCDs (charge coupled devices) are light sensitive elements; a kind of photo diode, which "measure" the impinging light and thus convert the intensity into digital impulses via an analog to digital converter. A multitude of such CCD "eyes" are combined in a CCD array, which scans the original stepwise in horizontal strips. Simple construction, larger formats, white light (in contrast to laser), high scanning speed, and flat original holders are advantages of CCD scanners over laser scanners.

Center

Where a line of text is set with equal space in the left and right margins; a layout whereby the column remains ragged equally to both the left and right producing a symmetrical layout.

Center alignment

When characters are set halfway between the baseline and capital line.

Center spread

The pair of pages that comes at the center of a folded section (e.g., pages 4 and 5 in an 8-page section).

Chain dot screen

A halftone screen, in which the 50 percent dot is not square, but forms a chain of semi-elliptical dots. It has the advantage over the conventional screen in that a pair of small discontinuities replaces a discontinuity in the characteristic curve at 50 percent, normally at 40 and 60 percent. This advantage, however, is offset by a reduction in effective sharpness. (See Elliptical Screen.)

Character

A single letter of typography sign or symbol.

Chrome

Alternate term for **Transparency**.

Chromalin

A DuPont trademark for an integral color proof that is a photographic print created by exposing each of the four separations to a primary-colored, thin-pigmented emulsion layer, which is laminated in register to a sheet of white paper.

Cicero

A unit of measurement; 12 didot points (4.52mm; 0.178 inches) = one Cicero.

CMYK

Cyan, magenta, yellow, and black: the four process ink colors used in four-color process printing. Creating a color separation breaks an image into cyan, magenta, yellow, and black components, from which most colors can be reproduced. The theory, 100 percent of cyan, magenta and yellow create black. In practice, though, the addition of black ink (abbreviated R) is necessary to print a true black. (See also RGB, subtracting primaries.)

Coarse screen

Screen with a ruling of less than 133 lines per inch (LPI).

Coated paper

One with a surface finished with a layer of china clay to give smoothness.

Colophon

Text giving production details of a document. Sometimes used incorrectly for a publisher's trademark.

Color bar

Strip of colors printed near the edge of a press sheet to help evaluate ink density.

Color balance

A combination of cyan, magenta, and yellow that produces a neutral gray.

Color break

In multicolor printing, the point or line at which one ink color stops and another begins.

Color correction

Adjusting color separations to make accurate reproduction, accommodating them to the limitations of a particular press, inks, paper, and technology used.

Color gamut

Range of colors.

Color look-up table

Software for relating representations of a color to a set of RGB gun voltages.

Color matching

Specifying flat colors according to numbered samples on a color chart available from the printer or in a swatch book, such as Pantone®. Process colors are usually specified in percentages of screens of the four colors, for example, XY 5M 2C 1K (X usually means 100 percent, so here it calls for 100 percent yellow, 50 percent magenta, 20 percent cyan, and 10 percent black). The letter K designates black to avoid confusion with the word blue, which is often used instead of cyan. Often the word red is used instead of magenta.

Color Proof

A representation of the final printed product for checking color accuracy and other elements. A color proof can be created in a number of ways: when the piece is in digital form, a composite proof can be printed on a desktop color printer; from the plate-ready negatives, a "dry-proof" can be created with a system such as 3M's Matchprint or DuPont's Chromalin; or, after the printing plates have been made, a "press proof" can be printed on a printing press.

Color Separation

Strictly, the process of splitting full color artwork into its spot color or its CMYK components. Loosely, one or all of the separate processes of film from which a multi-color version will be printed. This is known as a set of halftone negatives for making plates for 4-color process or spot color printing.

Color sequence

The order in which inks are applied. In four-color process, it is usually yellow, magenta, cyan, and black. In spot-color printing, the sequence may vary according to the substrate and the density of the inks.

Color space

A mathematical abstraction that describes a domain of visible or reproducible colors.

Color temperature

The temperature (measured in degrees Kelvin) to which an object would have to be heated before it would radiate a given color. The higher the temperature, the bluer the light. Often used in the calibration of computer monitors.

Colorant

Dyes and pigments used to color materials.

Column depth

Body text, in which the depth of the area of type is specified in either pica ems, millimeters, inches or in lines of type, e.g., 44 lines of 10 point.

Column rule

A fine rule to separate columns of text.

Comprehensive or comp

A preliminary version of a design, often created for client input or approval; a comp (short for comprehensive) dummy. When produced on a promotional product, comps are often called “spec samples”.

Composite film

Graphic arts negative made by combining two or more images.

Composite proof

Proof of color separations in position with graphics and type.

Comprehensive dummy

Complete simulation of a printed piece. When produced on a promotional product, comps are often called “spec samples”.

Composition

Text matter set in type.

Concept Proof

Color proof (printout) from desktop color PostScript™ printer. The concept proof is used to preview for design, layout, text positioning and color selection. Used by service provider, printer or decorator to give to a client for project approval.

Condensed (Narrow/Compressed)

Describes type in which the width is narrower in proportion to its height when compared with normal type, e.g., Helvetica Narrow.

Contact print

Photographic print made by exposing a negative in direct contact with paper.

Contact screen

A screen made of polyester film, having exposed on it vignette dots. When the reflected light is passed through it the resultant image on the film below is a negative halftone.

Continuous tone

A photograph, rendering, or other similar image that is made of blended gray tones or values that flow into each other gradually and without hard edges. An image having a variety of gray scale values, e.g., a photograph, that has not been screened as opposed to line art, which is, for any one pixel, black, white or a specific color. In most professional systems continuous tone images are digitized into eight bits to capture 256 levels of gray or 24 bits to capture 16 million colors. A normal photographic image not produced by a printing press. (See halftone.)

Contone

An abbreviation for continuous tone.

Contour

A photograph from which all the background has been removed.

Control strip

Used in the production of proofs and lithographic printing plates, thus ensuring uniformity through the reproduction process.

Conventional screen (glass screen)- Traditional process

A halftone screen in which the 50 percent dots are square. This effect produced by two glass plates with horizontal rules placed at 90 degrees to one another and then placed on top of original film.

Conversion tables

Mathematical tables that enable the designer to convert any linear dimension into any other.

Copy

(Computers) To store a duplicate. (Print) The original manuscript or typescript from which text is to be keyboarded.

Counter

The white, or negative, space enclosed by the strokes of characters.

Creep

Phenomenon of middle pages of a folded signature extending slightly beyond outside pages.

Cropping

Cutting an illustration to fit a given area or to remove unwanted background along the edges.

Definition of a certain rectangular area of a picture. This area is the portion of the original that should be processed. The remaining area will be truncated. Cropping can be done at scanning time or at the graphics workstation.

Cursor

Screen display symbol, bar, cross or guideline to mark the entry position for text and graphics.

Cyrillic

Alphabet for Russian and other Slavic languages.

D

Data compression

A method of reducing image file sizes and hence storage or transmission time requirements by utilizing statistical redundancies in data patterns.

Deboss

To press an image into paper so it lies below the surface.

Decorative typeface

A stylized typeface that is often used for headline intended to catch the reader's attention.

Densitometer

A tool used to measure the amount of light transmitted through or reflected from a piece of artwork. Often used to measure percentage values in halftones.

Density

A logarithmic measurement of reflected or transmitted light.

Descender

The part of the letter that comes below the baseline in lower case letters such as *g*, *p*, *q*, or *y*.

Digital graphics

The storage, manipulation and reproduction of graphic images by digital means.

Digitized graphics

An alternate term for digital graphics.

Digitizing

To translate analog information (an unstructured form such as a contone image) into digital information, which can be represented by values within a computer file. A photograph is digitized in a modern graphics system by a scanner.

Dingbats

Ornamental typographic elements, such as stars or arrows, e.g., ❖ ►, ⊕.

Direct digital color proof

Proof made directly from digital data output by a desktop or high-end color prepress systems without an intermediate film stage.

Display type

A typeface designed to be set at relatively large sizes (usually 18 points and above) and used in titles, headlines, signs, etc. (See Decorative typefaces.)

Dithering

Alternating the values of adjacent dots or pixels to create the effect of intermediate values of color.

Dither patterns

An electronic process, when using low resolution output devices such as a laser printer; a halftone effect is produced by a pattern of differing densities (dots per square unit of image) of black dots.

Doctor blade

Flexible metal strip that cleans excess ink from a gravure plate prior to each impression.

Dot area

The proportion of a given area covered by halftone dots, usually expressed as a percentage.

Dot etching

A manual technique for chemically changing the dot size on halftone films, usually for localized or general color correction.

Dot gain

The change in size of a printing dot from the film to the printed sheet, expressed as a percentage; an increase in dot size from 50 percent to 60 percent is called a 10 percent gain. (See Fill-in.)

Dot matrix

Any array in which a sequence of coded dots may be selected to form an image used by low-resolution dot printers such as the original Apple ImageWriter and many line printers made by Okidata and other companies.

Dot modulation

A method for increasing the sharpness of a halftone image by varying the shape and position of the dots.

Dot pitch

The distance between adjacent dots in a halftone screen.

Dot shape

The outline boundary of a dot within a halftone image.

Dot size

The size of an individual dot within a halftone that is normally expressed as a percentage of the total cell area or as its equivalent diameter.

Doubling

A printing defect in the halftone imaging process in which a faint secondary image appears slightly out of register with the primary image.

Downloadable font

A font that can be transferred into the printer's memory (that retains data until the unit is switched off or reset) or into the hard disk (whereby the data is retained until the operator chooses to remove it).

DPI

Dots per inch indicate screen or printer resolution. A single figure (e.g., 1270 dpi) means dots per linear inch both vertically and horizontally, while two figures (e.g., 400 x 800 dpi) indicate horizontal and vertical resolutions respectively. (See also LPI, PPI.)

Drop cap

Upper case character, set in a larger type size and extending into the lines of type with alignment along the capital line. A large capital letter, placed at the beginning of a character or paragraph that drops into the surrounding text. Also called drop initial.

Drop-out

The loss of small highlight dots during the halftone reproduction process. This is sometimes produced deliberately for special effects or to remove a highlight background.

Drop-shadow

A tint or solid set to one side of an illustration or type form to give a shadow effect.

Dummy

Preliminary drawing or layout showing visual elements. Also a simulation of a printed piece using paper specified for a job.

Drum scanner

An image scanner or digitizer in which the original is wrapped around the surface of a cylindrical drum.

Duotone

A two-color halftone made from a one-color photograph. The photograph is screened at two angles.

Dynamic range

The full complement of gray levels in a continuous tone image, from the lightest gray to the darkest. Most scanners digitize continuous tone imagery in 8-bits, capturing 256 levels of gray, which are matched to the true gray levels, or dynamic range, of the original image.

E

Egyptian (Slab Serif/Square Serif)

Monoline typeface of early nineteenth century origin having unbracketed slab serifs. A style characterized by strong, uniform strokes and thick, square serifs.

Electronic image assembly

Assembly of new image from portions of existing images or elements using a computer.

Electronic page assembly

Assembly and manipulation of type, graphics and other visual elements on a computer screen.

Electronic publishing

Publishing by printing with a computer-controlled photocopy machine.

Electronic retouching

Using a computer to enhance or correct a scanned photograph.

Elliptical screen

An alternative term for the Chain Dot Screen.

Ellipsis

A character made up of the three full points (...). Ellipses are used to indicate an omission; often used when portions of quoted matter are omitted.

Em

In printing terms, it is a square unit with edges equal in size to the chosen point size. It gets its name from the letter *M*, which originally was as wide as the type size.

Em dash

A dash used in punctuating, the length of one em.

Em quad

Clear white space being equal to the square, or em, of the type size.

Emulsion

The photographic coating applied to film to make it photosensitive. When contacting or plate making, emulsion contact should always be made.

En

A unit of measurement that is half as wide as an em.

En dash

A dash approximately half the width of an em dash.

En quad

Clear white space equal to half of the em of the type size.

En rule

See En dash.

Enlargement

The process of increasing the size of an image.

EPSF

Encapsulated PostScript File Format. EPSF files contain gray level, halftone screen and sometimes computer screen information, all within one file.

Expanded type

A typeface with a slightly wider body.

Exposure

The period of time for which a photosensitive material is exposed to a light source. In numerical terms it is defined for an area of photographic emulsion as the product of irradiance and time.

Extended

Also expanded. The letters are stretched horizontally while retaining their original height.

F

Face

An abbreviation for typeface referring to a family in a given style. With hot metal type, the area that received the ink for printing the character image.

Fake color

Producing a color illustration, usually from a black & white photograph, by specifying tint areas in terms of their four process color components.

Fake duotone

Halftone in one ink color printed over screen tint of a second ink color.

Family

(Type) A series of alphabets in different weights with the same design characteristics.

Fill-in

The loss of a shadow detail due to the filling in of small white dots in the halftone reproduction process. Also known as Dot Gain.

Filters

Traditionally, special glass placed in front of a camera lens to create effects such as blurring or sharpening. Within a graphics workstation, the applications software generates these effects.

Fine screen

Screen with ruling of more than 150 lines per inch (LPI).

Flat

(Photography) Characteristic of an image that lacks contrast. (Printing) An assembly of negatives taped to masking material and ready for plate making.

Flatbed scanner

An image scanner or digitizer in which the original is held flat during the scan process.

Flexography

Method of printing on a Web press using rubber plates with raised images. This enables printing to be achieved on non-flat surfaces extensively used in the packaging industry.

Floating accent

An accent symbol that remains separate from the main character.

Flop

An alternative term for wrong reading.

Flush left/right

Align type to the left or right, leaving the other edge ragged.

Fogging exposure

An alternative term for flash exposure.

Folio

Term used to indicate printed page number.

Font (sometimes: Fount)

A complete set of characters (letters, figures, punctuation, etc.) in a typeface. In digital typography, the data that describes the complete character set for a given typeface. For example, using PostScript technology, screen fonts are made up of displayed fonts or pixels, while printer fonts are scalable outlines that can print characters of virtually any size.

Font editing

The process used in designing fonts for digital typesetting.

Four-color process printing

Technique of printing that uses the four process colors of ink to simulate color photographs or illustrations. (See CMYK, Color separation, and Process printing.)

Frequency

(See Screen ruling.)

Full measure

A line of text set to the entire line width.

G

Galley

The name applied to typeset that is now ready to be made into pages.

Galley proofs

Text proofed in continuous columns, not divided into pages.

Gamma

The slope (gradient) of the linear central portion of a characteristic curve for a photographic emulsion ($dD/D \log E$) or, for a CRT, the relationship between luminance and grid drive voltage.

Gang

To reproduce two or more printed pieces or multiple copies of the same piece simultaneously on one sheet of paper. Also, to halftone or separate more than one image in only one exposure.

Gang scan

Process whereby a number of images are scanned in one pass and then separated into individual files on the graphics workstation.

GCR

Gray component replacement, a relatively new technique in four-color process printing in which black ink is substituted throughout the image for percentages of the cyan, magenta and yellow inks. By reducing overall ink usage, GCR can keep colors more consistent avoid certain on-press problems, and save money. (See also UCR.)

Ghost halftone

Halftone that has been screened to produce a very faint image.

Gothic

Typefaces with no serifs.

Gradients (also called Graduated tints or shades)

A term used to describe the pattern of shades or tints including mixtures of different colors that change from one color to another, highlight to shadow or vice versa.

Grain

The direction in which a sheet of paper is made and along which it folds most readily.

Gravure

Method of printing using etched metal cylinders, usually on Web presses.

Grayscale

The range of tones from black to white, usually in the context of computer graphics. A Grayscale scanner is used to convert the continuous tones of a black & white image (such as a photograph) into digital information specifying gray levels.

Gray level formats

Image formats such as TIFF, EPSF, and RIFF that can save gray level information.

Gutter

The space between columns; also the two inside margins of facing pages.

H

H&J

Compound for Hyphenation and Justification. The process of allowing the computer to adjust type to fill the measure in the manner requested. (See Hyphenation and Justify.)

Hairline

A very fine rule. Also a very fine line making up part of a character.

Halftone

A piece of artwork (film or paper, positive or negative) in which continuous tones are simulated by regularly spaced array of small dots of varying size (smaller dots represent lighter areas and larger dots darker areas). Printing a black-and-white photograph on a printing press requires the creation of a single halftone; four-color process printing requires a separate halftone for each of the process colors.

Halftone cell

The area of a graphic image occupied by a single halftone dot.

Halftone dots

Dots that by their varying sizes create the illusion of shading or a continuous-tone image.

Hard dot

A halftone dot with a very crisp, clean cut edge.

Heavy

Synonymous with bold. A darker form of the Roman version of typeface.

High key

A photograph in which the majority of tonal values are higher, or lighter, than a middle gray.

Highlight

The whitest or brightest parts of a photograph; the opposite of shadow. Also, the lighter (low density) area of a continuous tone or halftone image.

Hints

Algorithms contained in some fonts, such as Adobe PostScript™ fonts, that increase type quality when printing at low resolutions or in small point sizes.

Hot metal

A form of typesetting in which characters are cast in a molten lead alloy.

Hyphen

A small dash used to connect the two parts of a compound word.

Hyphenation

A word that has to be split at an appropriate point between the end of the first line and the beginning of the second line to preserve good interword spacing.

I

Image area

Portion of a negative or plate corresponding to inking on paper; portion of paper on which ink appears.

Image assembly

Alternate term for stripping.

Image carrier

The device on a printing press that carried an inked image either to an intermediate rubber blanket or directly to the paper or other printing substrate. A direct printing letterpress form, a lithographic plate, a gravure cylinder, and a screen used in screenprinting are examples of image carriers.

Image file format

An expression used to describe a computer file consisting of image data. Examples of such files, not all of which are acceptable for printing, are TIFF, EPS, RIFF, BMP, PCT, PCX, GIF, PNG and JPG.

Image processing

The manipulation of graphic images by electronic or optical means.

Image scanner

(See Scanner.)

Imposition

The arrangement of pages in a press form so they will appear in correct order when the printed sheet is folded and trimmed.

Imprint area

The allowable portion of a promotional product reserved for the printed advertising message.

Indent

A blank space at the beginning of a line of text.

Infant character

Specially drawn characters found in an ordinary font that is suitable for young children's books.

Inferior characters

Small letters, numbers or symbols whose baseline aligns with the bottom of the descenders.

Intaglio

An alternate name for the gravure printing process.

Integral proof

Color proof of separation negatives exposed in register on one piece of proofing paper.

Interlacing

A method of reducing the effect of frame flicker of a CRT monitor by displaying half the tonal number of scan lines or image samples in alternative frame periods. This allows the frame rate to be increased while maintaining the same data rate.

Interline spacing

Extra space inserted between lines of text. (See Leading)

Irradiance

The quantity of light per unit area incident on a surface.

Italic

Type with sloping letters. Also called cursive or oblique.

J

Justify

The alignment of text along a margin or both margins. This is achieved by adjusting the spacing between the words and characters as necessary so that each line of text finishes at the same point.

K

Kern or Kerning

Part of a character that overhangs another to aid even spacing.

Knockout

The absence of printing inks in a specified area. An object of a given color is often printed over an identically shaped knockout of other colors to avoid mixing inks in that area. The alternative is an overprint in which one object is printed on top of another.

L

Landscape

Work in which the width of the sheet or layout used is greater than the height. It is also used to indicate the orientation of tasks or illustrations, which are printed "sideways". (See Portrait)

Laser

An acronym for Light Amplification by Stimulated Emission of Radiation. Used to describe a device that emits a narrow beam of coherent light.

Layout

A drawing or sketch of the image as they are to appear on a particular page.

Lead or leading

Spaces added between lines of type to space out text and provide visual separation of the lines and measured in points or fractions. Named after the strips of lead, which used to be inserted between lines of hot metal type.

Letterpress

A printing process in which the image is formed in relief by raised areas of the plate.

Letter spacing

The addition of space between the letters or words to increase the line length to a required width or to improve the appearance of a line.

Ligature

Two letters drawn as a single character of type such as œ.

Light face

One of the many variants to the relative blackness of a typeface.

Line art

An image having only two gray scale values, black and white, as opposed to a continuous tone image that has many gray scale values. Line art images are digitized in 1-bit to capture black and white for any one pixel.

Line-for-line

A typographic specification for body text where each line is calculated and specified separately.

Lines per inch (LPI)

The number of lines or rows of dots per inch in a screen and, therefore, in a screen tint, halftone, or separation. (See also DPI, PPI.)

LPM (Lines per Minute)

Abbreviation meaning the speed at which a typesetter sets or a printing device generates lines of type, calculated in lines per minute. With the advent of page-oriented output devices, e.g., laser printers, LPM has been generally superseded by PPM (pages per minute).

Linotype

Mergenthaler trade name for machine that sets lines of metal type.

Lithography

Method of printing using a chemically coated plate whose image areas attract ink and whose non-image areas repel ink.

Logotype (Logo)

A group of letters, words and/or symbols combined as a character or graphic. When applied to phototypesetting, the term is usually applied to describe a graphic that can be set within the limits of maximum character height.

Loose proof

Proof of one-color separation.

Low contrast ratio

Refers to a low contrast between the lightest and darkest gray scale values in an image. Examples would be blue lines on a black background or yellow lines on a white background.

Lower case

Small letters of a typeface, e.g., *a, b, c*.

M

Magnification

The ratio of output to original image size and usually expressed as a percentage. Enlargement and reduction corresponding to respective magnifications of greater or less than 100 percent.

Make-ready

Setting and testing of all the press controls just prior to a printing run.

Mark up

Copy prepared for a compositor setting out in detail all the typesetting instructions.

Mask

Traditionally, to cover selected areas of artwork with opaque material, to keep them from being exposed to light in plate making. In computer graphics, any equivalent procedure that creates an inactive area.

Measure

Denotes the width of a line or lines of type expressed in pica ems, Cicero, millimeters or inches.

Mechanical

Camera-ready assembly of type, graphics, and other line copy, complete with instructions to the printer. A single piece of artwork formed by means of paste-up.

Mechanical separation

Mechanical prepared using a separate overlay for each color to be printed.

Mesh

An alternate term for a screen. In serigraphy (screen printing), mesh refers to the nylon or other fabric tightly stretched across a metal or wooden frame.

Mezzotint screen

A special-purpose, halftone screen where proportional dots are positioned randomly within the image.

Mid-tone

These are the areas of the contone and the halftone that fall between the highlight and shadow.

Mock-up

Alternate term for Dummy.

Moiré (Pattern)

An undesirable pattern of visible "waves" caused by overprinting halftones whose screen angles are aligned improperly. A moiré can result from two super-imposed halftones; with four halftones, as in a color separation, the likelihood is correspondingly greater.

Monospace

A font in which all characters occupy the same amount of horizontal width regardless of the character. Typical of a typewriter font, e.g., Courier.

Monotone

A reproduction in one color. The term "monochrome" is commonly used in the area of gravure reproduction photography in place of the term more frequently used in other areas of reproduction photography, e.g., black and white reproduction.

Modern

A group of serif typefaces dating from the late 18th century characterized by the vertical stress of the characters.

Mottle

Spotty, uneven ink coverage especially noticeable in large solids.

Muted tone

An alternative term for low contrast.

Montage

A combination of several photographs combined to form one illustration.

N

Negative

An image in which the light and dark areas are reversed with respect to the original.

NFNT (New Font) numbers

A PostScript font numbering system enabling over 30,000 different font numbers to be recognized by the computer without substitution of incorrect fonts.

Normalize

To apply a normal graymap to an image, usually used with very dark images.

Numbering convention for typeface versions

A number can represent the weight of version or version of a typeface. Typical typefaces that use these numbers are Frutiger and Univers.

O

Oblique

Usually the term applied to electronically sloped typefaces.

OCR

Optical Character Recognition; Software that allows typewritten copy to be scanned into any of several text-editing applications, thus saving re-typing time.

Offset

Alternate term often used for *Setoff*.

Offset lithography

Usually shortened to "offset." A process of printing from a flat surface in which the printing areas are greasy and the non-printing areas are damp. The greasy and inked image is set off from the printing plate onto a rubber blanket that transfers it to the paper.

Old English

Same as *Black Letter*.

Old style figures

Numerals that are not aligned on the baseline.

Opacity

A material's lack of transparency; for printing ink, the ability to hide or cover up the image or tone over which it is applied. An opacity value of 100 corresponds to a transmission density of 2.00 D.

Opaque ink

Heavily pigmented ink that blocks out color of underlying ink or paper.

Opaque media

Media that does not allow light to transmit through it, e.g., printed photographs and line drawings. Non-opaque, or transparent media, includes negatives and overhead viewgraphs.

OPI

Open Prepress Interface, a set of PostScript-language comment conventions developed to provide a standard format for passing layout information about scanned images to color-separation

software. Various desktop separation software programs, such as Quark Xpress, and high-end color prepress systems can use OPI to automate the stripping of color images for printed publications.

Outline (Open Face)

Typefaces that appear white with a black outline.

Outline halftone

Halftone in which background has been removed to isolate or silhouette an image.

Overlay

Transparent paper or film placed over artwork to protect it from damage, to indicate instructions to the printer, or to show the breakdown of color in mechanical color separations.

Overlay proof

Color proof consisting of acetate sheets covering each other in register, one for each color to be printed.

Overprint

An object that is printed atop background colors (e.g., black type might be printed as an overprint on a colored background). The alternative is a knockout. In many PostScript™ compatible illustration software programs, inks can be selectively specified for overprint, which will affect the way color separations are produced.

Overset

In composition, type set in excess of a given line measure or column depth.

P

Page

One side of a leaf. To page, dividing galley proofs (and illustrations) into pages.

Page Formats

Size of page to be printed by image-setter. Most commonly encountered formats are:

A4 210 x 297 mm

A3 420 x 297 mm

US Letter (A) 216 x 279 mm (8.5 x 11 inches)

Tabloid (B) 280 x 430 mm (11 x 17 inches)

Broadsheet 400 x 600 mm approx.

Page make-up

The arrangement of lines of type and illustrations into pages of proper depth with page numbers, headings, etc.

Page proofs

The stage following galley proofs, in which pages are made up and read for errors.

Pagination

Assembly of type with other line copy into page format. When done by hand, this is makeup or paste-up; when done electronically, it is computer-aided pagination (CAP).

Panchromatic

The emulsion of photographic film that is sensitive to all colors visible to the human eye.

Pantone®

Pantone, Inc.'s check-standard trademarks for color reproduction and color reproduction materials. The PANTONE MATCHING SYSTEM (sometimes referred to as "PMS") identifies over 500 colors and the formulas for creating inks in those colors. Four-color process printing can only approximate many of these colors. You can select PANTONE Colors in various illustration and desktop publishing software programs.

Paper dummy

Unprinted sample of a proposed printed piece trimmed, folded, and if necessary, bound using paper specified for the job.

Paste-up

Type proofs and illustrations stuck together as a guide; the various elements of a layout (typeset, text, illustrations, etc.) mounted and pasted in position to form camera-ready artwork.

Patterned type

Text type produced using tints instead of all black and white areas.

Photomechanical transfer

The process of transferring a made-up image to a one piece positive.

Picture element, also called Pixel

A component part of a graphic, such as a single dot in a halftone.

Pi character

Special symbols that are used in typesetting, which are often found outside the normal range of characters in a font.

Pica

A printing industry unit of measurement. There are 12 points to a pica, one pica = 0.166 inch.

Pi font

A set of special characters for a particular profession or discipline. Examples of pi font include

mathematical symbols, cartographic symbols, monetary symbols, fractions, or custom characters.

Pigment

Finely ground particles giving color and opacity to ink.

Pixel

The basic unit in which a scanned or output image is divided. For contones each pixel also has a gray level component. The number of pixels per inch in an image that can be captured by a scanner or output by an image setter or LaserWriter is referred to as their resolution.

Pixels per inch (PPI)

Pixels per inch, a measure of the resolution of a computer screen or scanner. (See also DPI, LPI.)

Plate

A sheet of metal, plastic, or rubber used to transfer an ink image to paper as part of the print process.

Plate-making

The operation of producing a finished image carrier that is in the form of a plate, usually the flexible type, designed to be mounted around a printing cylinder.

PMT (Photo Mechanical Transfer)

The process of transferring a made-up image to a one-piece positive.

Point

A unit of measure for specifying type, about 1/72nd of an inch or 1/12th of a pica.

Portrait

Work in which the height of the sheet or layout used is greater than the width. (See Landscape)

Positive

A photograph reproduction on paper or film in which the tonal values correspond to the original.

Posterization

An effect whereby the transitions between gray levels can be seen. Caused by insufficient gray levels being supported by the input scanner, application software, or image-setter.

PostScript™

A Page Description Language (PDL) developed by Adobe Systems that renders text and graphic images on computer monitors and output devices, such as image-setters, laser printers, and other devices using PostScript RIP's from various front-ends. PostScript™ has been the language used by most printing technology since the mid-1980s. PostScript information can also be stored in EPSF files. (See EPSF)

PPM

Pages per minute. (See LPM)

Preparation

Camera work, stripping, plate making, and other activities by a trade camera service or printer before presswork begins. Also called prep.

Pre-press

Alternate term for Preparation.

Pre-screened original

An original in which gray tones are already represented by halftone dots.

Press proof

Proof made on press using the plates, paper, and ink specified for the job.

Printer font

Font format required by any high quality output device for correct representation of a typeface. PostScript™ fonts have both printer and screen font formats.

Printing

Any process that repeatedly transfers an image from a plate, die, negative, stencil, or electronic

memory.

Printing plate

A surface (usually metal), rubber, or plastic that has been treated to carry an image.

Process colors

The four ink colors used in four-color process printing: cyan, magenta, yellow, and black. (See also CMYK.)

Process-color inks

Three subtractive primaries used in conjunction with black to reproduce full-color originals. Process yellow reflects red and green light and absorbs blue light. Cyan (blue) reflects blue and green light and absorbs red light. Magenta (red) reflects red and blue light and absorbs green light.

Process printing

The process of printing color images by means of four separate printing plates with magenta, yellow, cyan, and black ink pigments. Also called Four-Color Process Printing.

Progressive proof

A set of press proofs that include the individual process colors, plus overprints of two-, three-, and four-color combinations in their order of printing.

Proof

Test sheet made to reveal errors or flaws, predict results, and record how a printing job is intended to appear.

Proportional spacing

A method of spacing whereby each character is spaced to accommodate the varying widths of letters or figures and so increasing readability. Books and magazines are set proportionally spaced; typewritten documents are generally monospaced.

PT

Abbreviation for point(s).

Q

Quad

In hot-metal typesetting, a piece of metal, which being shallower than the type slug, does not take or transfer ink and therefore has no other function than to fill out lines of type where large spaces are required; quad spaces are usually em quads or en quads.

Quick printer

Printer whose business attitude emphasizes basic quality, small presses, and fast service.

R

Ragged

Lines of type that do not start at the end of the same left- or right-hand margins. (See Ragged Left/Right)

Ragged Left/Right

Successive lines of type that are of unequal lengths and aligned at either the right- or left-hand column.

Rasterization

The conversion of computerized image data into tiny dots. Raster dots are distinct from halftone dots; everything on a rasterized page, whether a solid area of a halftone, is made up of raster dots. For instance, when an image-setter rasterizes and prints an entire page at 2540 dpi, including a 150-LPI halftone, each halftone dot is composed of thousands of raster dots.

Raw data

A term used to describe data to which data compression has not been applied, e.g., bitmap representation.

Readability

A function of how type is used. Given a legible type, the readability of a page will depend as much upon the layout as on the typeface.

Reduction

The process of decreasing the size of the image.

Registration

The precise alignment of film or plates for printing. Register marks, usually placed outside the trim area, assist the stripper and printer in achieving accurate registration in multiple-color jobs.

Register

The location of one printing plate in relation to another. Fitting two or more printed images on the same paper in exact alignment with each other.

Reflective art

Artwork, such as photographs or paintings, viewed by reflected light; compared with transparency.

Reflective copy

A piece of artwork that is viewed by reflected light, e.g., photographs, drawings on paper, type. Also called "reflection copy", "reflective art". (See also transparency.)

Registration marks

Crosshair targets on color separations to allow precise positioning of the various pieces of film.

Resolution

The number of dots available to represent graphic detail in a given area. On a computer screen,

resolution is measured in pixels per (linear) inch, or PPI; on a printer, it's measured in dots per (linear) inch, or DPI; on a scanner, in pixels or dots per (linear) inch; and in a halftone, in lines per (linear) inch, or LPI. The sharpness of definition of a digitized image depends on the number of PPI, DPI, or LPI.

Retouch

Manual adjustment to an illustration or other image.

Reversal

The process of producing a photographic negative output from an original.

Reversing out

Printing a white image on a solid background or tint panel.

Reverse type

White characters set on a dark background.

RGB

Red, green, and blue, the additive primaries: RGB is the basic additive color model used for color video display, as on a computer monitor. Mixing various percentages of red, green, and blue light can recreate most of the spectrum; combining 100 percent of all three creates white light. (See also CMYK.)

RIP

Raster image processor, the component of an output device, such as a printer or image-setter that performs the rasterization of the image; may be either a hardware or software component.

Rivers

Streaks of white space caused when type is set with too much space between words, and by spaces being immediately above and below one another; often referred to as "rivers of white".

Roman

Type that has vertical stems as distinct from italics or oblique set at angles.

Rosettes

The patterns formed when halftone color images are printed in register at the correct screen angles.

Rough

A very preliminary layout or design, often done on tracing paper, to give a general idea of the size and position of various type and graphic elements.

Royal font (Also True Type)

A font technology used under both Macintosh and Windows operating systems. It uses a single font outline with hints to render the desired bit maps for screen and printers using Quick Draw technology.

Rules

Lines of various thickness and pattern used to divide and box text on a page.

Run

The number of copies to be printed.

Run on

In printing, extra copies printed at the same time as the original run, also called over-runs. In typesetting, text continuing on the same line.

S

Sans serif

A typeface without serifs.

Scaled image

Refers to an image that has been enlarged or reduced relative to its original dimensions. Images should never be scaled up or down after screening.

Scanner

An optical device for converting continuous-tone artwork into digitized data. Scanners can be black-and-white or color, may scan reflective copy or transparencies or both, and vary from hand-held or desktop models to highly sophisticated color imagers.

Score

To mark a card with a blunt blade along the line of a fold before creasing to prevent cracking.

Screen

Traditionally, the device (a piece of glass or film with tiny transparent areas) through which a photograph is converted into a halftone; loosely, the halftone pattern itself. The eye sees a pattern of dots as a shade of gray. The smaller the dots, the lighter the shade; the larger the dots, the darker the shade. Dots are produced by photographing the artwork (photograph or any contone illustration) through a screen of fine lines, which can vary from 65 to 150 or more per inch. Sixty-five or 85 line screens are used for printing newsprint. Better paper can accommodate more detailed printing produced by finer screens, which yield higher resolution. A screen has three attributes:

1. The angle at which rows of dots are placed relative to the horizontal plane;
2. The screen ruling (also known as resolution but NOT resolution of the output device) in lines per inch, specifying pitch of the screen (space between rows of dots);
3. Dot shape (shapes of dot most commonly used are round, elliptical, and line).

Screen Angle

Each element of a four-color separation must be photographed through a screen that has been placed at a specified angle, to avoid moiré patterns when the colors are superimposed. Black is normally shot at 45 degrees, magenta at 75 degrees, cyan at 105 degrees, and yellow at 90 degrees (some angles are even copyrighted). Precise registration is required.

Screen font

Font format required by a computer to display a representation of the typeface on the monitor when using PostScript™ fonts. Bit map fonts displayed on the screen, the characters being made up of dots or pixels to the resolution of that screen. When used in conjunction with font management extensions, such as Adobe Type Manager, text can appear smooth on the monitor at all sizes with only a single screen font of any size being present.

Screen Ruling

The number of rows or lines of dots per inch (LPI) in a screen for tint or halftone. The spacing of the rows or columns of the dots within a halftone screen measured along one of the orthogonal axes and usually expressed in lines per inch or lines per centimeter. Also called "screen frequency".

Secondary color

A color that results from mixing two primary colors; orange (yellow and red), purple (red and blue), or green (blue and yellow).

Section

A printed sheet folded to page size.

Serif

The small terminal stroke at the end of the main stroke of a letter.

Set

To assemble letters into words and lines or the width of an individual character across a body.

Setoff

Undesirable transfer of wet ink from top of one sheet to the underside of another as they lie in the delivery stack of a press.

Set solid

Type set without any extra space between the lines.

Shadow

The darkest point in an image; the opposite of a highlight.

Shingling

Moving images (full page) fractions of an inch to center the image on the sheet of paper. This method is being used with magazines/papers that are saddle-stitched (center-stapled), e.g., magazines and catalogs. Where the inside pages are smaller than the outside pages, but imagery should always be at the same place.

Show-through

The degree to which the print on one side of a sheet can be seen from the other side.

Signature

A group of pages printed on a sheet of paper which, when folded and trimmed, will appear in their proper sequence.

Small cap

A set of capital letters that is smaller than the standard and equal in size to the lower case letters for that type size.

Soft or discretionary hyphen

A specially-coded hyphen that is only displayed when formatting, and the hyphenation word put it at the end of a line.

Solid leading

Leading equal to the point size of the type being used; for example, 12 point set on 12 point of lead.

Spot Color

A color applied to text or graphics (rather than derived through color separation). A spot color can be achieved by the addition of a specially-mixed ink (often as a second color with black), or simulated by specifying percentages of cyan, magenta, yellow and black inks (in a four-color job). When printing, using processes that do not rely on 4-color process, spot colors are often chosen from swatch libraries, such as Pantone or Toyo. Some printers offer their own "house" colors.

Spread

A pair of facing pages; in printing, the enlargement of a color area to build trap with adjacent areas of different color.

Strip

To physically attach separate pieces of film, so that they can be composed into a single piece. For instance, a halftone traditionally must be stripped together with the type and line-art graphics to create the black negative for a black-and-white print job. "Electronic stripping" is now sometimes used to describe the digital composing of films.

Swash

Characters with additional flourishes.

T

Tabbing

The arrangement of tabular material over a number of narrow columns.

Tabs

Abbreviation for tabular. (See Tabbing)

Text face

A typeface designed to be readable in long passages. Text faces are usually set at sizes from 9 to 12 points.

Threshold

The point at which a pixel is considered white or black. It is utilized when scanning in line art mode to differentiate between the black and white areas of an image.

TIFF

Tag Image File Format, a file format for exchanging bitmapped and grayscale images (usually scabbed) among applications. Care must be taken when using TIFF as many different standards have been created, not all of which are compatible with each other.

Tip in

An illustration pasted onto a page after printing. Usually glued along one edge. Also used when adding one printed piece to another already completed job, such as custom inserts in pocket diaries.

Tone

The strength of a color from solid to light.

Tone scale

A range of gray tone values.

Tracking

The overall letter spacing in a passage of text. Some programs allow adjustment of tracking to tighten up a typeface that looks too airy, or to add space to even out lines of display text.

Transitional

A type style that forms a transition between Old Style and Modern faces. Characterized by moderate variation in stroke weight, smoothly-joined serifs and nearly vertical stress.

Transparency

Any artwork that is viewed by light passing through it, e.g., a 35-mm photographic slide, rather than reflecting off it. (See also reflective copy.)

Transparent media

Media that allows light to transmit through it, e.g., negatives, overhead viewgraphs. Non-transparent or opaque media includes printed photographs and line drawings.

Trap

To overlap abutting ink colors slightly, so that imperfect registration or press irregularities will not cause a white space to show.

Typeface

A letterform specifically designed to be made up into words and sentences by mechanical means. More than just an alphabet.

Typeface weight

Variations of blackness to the regular design of a typeface. There are no absolute standards, but the Helvetica number series is a good example, whereas Helvetica 25 is ultra-thin and Helvetica 95 is Helvetica Black.

Typesetting

Text generated in a recognizable typeface.

Type size

The measurement of any given typeface in points and also referred to as the point size; measurement is calculated from two lines of type without interline spacing, and calculated from baseline to baseline.

Typography

The practice of arranging type and the study of type forms. Sometimes used inaccurately in PCs to mean "typeface".

U

UCR

Under color removal, a technique in four-color process printing in which percentages of the cyan, magenta, and yellow inks are removed in the gray areas of an image. By reducing total ink usage, UCR can minimize on-press problems and save money. This technique is most often used in printing on absorbent materials such as wearables. (See also GGR.)

Uncial

A calligraphic typestyle that combines the attributes of upper case and lower case letters, rounding the normally straight lines of the capital.

Underscore

A word or sentence underlined with a thin rule.

Unit width

The fixed width of a digitized character.

Upper case

Capital letters of a typeface, e.g., *A, B, C*.

Umlaut

A type of accent. (See Accent.)

Unsharp masking

A means of increasing the sharpness of fine details and edges in the reproduction by making the photographic mask unsharp. This sharpness enhancement is done electronically in the graphic software.

V

Vector graphics

A method of image generation using a number of straight lines and/or arcs of different length and angular orientation.

Vectors

Straight and/or curved lines (arcs) plotting the contour of any letterform or graphic image.

Velox

Although originally a trade name, this term is now common usage to describe a positive halftone or linework image on any photographic paper.

Venetians and old faces

Two groups of serif typefaces developed around the early 16th century and showing their calligraphic origins in the lower case characters; the stress is diagonal and the serifs are bracketed and, except at the end of descenders, are given a consistent slant.

Vignette

An area that blends from different levels of black (e.g., 10 percent to 90 percent down a page) or blends from one color to another.

Vignette halftone

A photograph without definite boundary lines. The halftone is produced so that the edges fade softly into the whiteness of the unprinted paper. Sometimes used to describe a graduated tint.

W

Watermark

Design added to some papers during manufacture, visible against the light.

Web press

Press that prints paper from a roll.

Weight

The degree of boldness or thickness of a letter or font. (See Typeface Weight)

Widow

A short line, usually the end of a paragraph, appearing at the top of a page.

Word space

The addition of white space between words is variable but, on average, may be calculated as either one en or one third of the em.

Wrong font

The accidental use of a character from a different typeface.

X

X-height

The height of a letter excluding the ascenders and descenders, e.g., *x*.

X-line

Synonymous for baseline. A means of increasing the sharpness of fine details and edges in the reproduction by making the photographic mask unsharp. This sharpness enhancement is done electronically in the graphics.