

Printing & Bindery Terms

Additive Color

Color produced by light falling onto a surface, as compared to subtractive color. The additive primary colors are red, green and blue.

Aqueous Coating

Coating in a water-base and applied like ink by a printing press to protect and enhance the printing underneath.

Bind

Usually in the book arena, but not exclusively, the joining of leaves or signatures together with either wire, glue or other means.

Bindery

Usually a department within a printing company responsible for collating, folding and trimming various printing projects.

Blanket

Rubber-coated pad, mounted on a cylinder of an offset press, that receives the inked image from the plate and transfers it to the surface to be printed.

Bleed

Printing that extends to the edge of a sheet or page after trimming.

Blind Image

Image debossed, embossed or stamped, but not printed with ink or foil.

Blueline

Prepress photographic proof made from stripped negatives where all colors show as blue images on white paper. Because 'blueline' is a generic term for proofs made from a variety of materials having identical purposes and similar appearances, it may also be called a blackprint, blue, blueprint, brownline, brownprint, diazo, dyeline, ozalid, position proof, silverprint, Dylux and VanDyke. Usually inexpensive, photographic proof from negatives where all colors are shown in blue (or another color) is called a **blueline**. The negatives used for the printing plates are exposed to a photosensitive paper to produce the image on the blueline. A blueline is a type of contact proof, so named because it is created by having the negative come in contact with a special type of paper.

Body

The main text of work not including the headlines.

Build a Color (or Color Build)

To overlap two or more screen tints to create a new color. Such an overlap is called a build, color build, stacked screen build or tint build.

Butt Register

Register where ink colors meet precisely without overlapping or allowing space between, as compared to lap register. Also called butt fit and kiss register.

Choke

Technique of slightly reducing the size of an image to create a hairline trap or to outline. Also called shrink and skinny.

CMYK

Abbreviation for cyan, magenta, yellow and key (black), the four process colors.

Coarse Screen (Low Line Screen)

Halftone screen with ruling of 65, 85 or 100 lines per inch (26, 34 or 40 lines centimeter).

Color Control Bar

Strip of small blocks of color on a proof or press sheet to help evaluate features such as density and dot gain. Also called color bar, color guide and standard offset color bar.

Color Correct

To adjust the relationship among the process colors to achieve desirable colors.

Color Gamut

The entire range of hues possible to reproduce using a specific device, such as a computer screen, or system, such as four-color process printing.

Color Separation

(1) Technique of using a camera, scanner or computer to divide continuous-tone color images into four halftone negatives. (2) The product resulting from color separating and subsequent four-color process printing. Also called separation.

Color Sequence

Order in which inks are printed. Also called laydown sequence and rotation.

Color Shift

Change in image color resulting from changes in register, ink densities or dot gain during four-color process printing.

Comb Bind

To bind by inserting the teeth of a flexible plastic comb through holes punched along the edge of a stack of paper. Also called plastic bind and GBC bind (a brand name).

Commercial Printer

Printer producing a wide range of products such as announcements, brochures, posters, booklets, stationery, business forms, books and magazines. Also called job printer because each job is different.

Comprehensive Dummy (Comp)

Simulation of a printed piece complete with type, graphics and colors. Also called color comprehensive and comp.

Continuous-tone Copy

All photographs and those illustrations having a range of shades not made up of dots, as compared to line copy or halftones. Abbreviated contone.

Creep

Phenomenon of middle pages of a folded signature extending slightly beyond outside pages. Also called feathering, outpush, push out and thrust. See also Shingling.

Crop Marks

Lines near the edges of an image indicating portions to be reproduced. Also called cut marks and tic marks.

Crossover

Type or art that continues from one page of a book or magazine across the gutter to the opposite page. Also called bridge, gutter bleed and gutter jump.

Cure

To dry inks, varnishes or other coatings after printing to ensure good adhesion and prevent setoff.

Cutoff

Circumference of the impression cylinder of a web press, therefore also the length of the printed sheet that the press cuts from the roll of paper.

Cutting Die

Usually a custom ordered item to trim specific and unusual sized printing projects.

Cyan

One of the four process colors. Also known as process blue.

Data Compression

Technique of reducing the amount of storage required to hold a digital file to reduce the disk space the file requires and allow it to be processed or transmitted more quickly.

Deboss

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

Densitometer

Instrument used to measure density. Reflection densitometers measure light reflected from paper and other surfaces; transmission densitometers measure light transmitted through film and other materials.

Density

(1) Regarding ink, the relative thickness of a layer of printed ink. (2) Regarding color, the relative ability of a color to absorb light reflected from it or block light passing through it. (3) Regarding paper, the relative tightness or looseness of fibers.

Die

Device for cutting, scoring, stamping, embossing and debossing.

Die Cut

To cut irregular shapes in paper or paperboard using a die.

Dot Gain

Phenomenon of halftone dots printing larger on paper than they are on films or plates, reducing detail and lowering contrast. Also called dot growth, dot spread and press gain.

Dot Size

Relative size of halftone dots as compared to dots of the screen ruling being used. There is no unit of measurement to express dot size. Dots are too large, too small or correct only in comparison to what the viewer finds attractive.

Dots-per-inch

Measure of resolution of input devices such as scanners, display devices such as monitors, and output devices such as laser printers, imagesetters and monitors. Abbreviated DPI. Also called dot pitch.

DPI

Considered as "dots per square inch," a measure of output resolution in relationship to printers, imagesetters and monitors.

Drawdown

Sample of inks specified for a job applied to the substrate specified for a job. Also called pulldown.

Dull Finish

Flat (not glossy) finish on coated paper; slightly smoother than matte. Also called suede finish, velour finish and velvet finish.

Dummy

Simulation of the final product. Also called mockup.

Duotone

Black-and-white photograph reproduced using two halftone negatives, each shot to emphasize different tonal values in the original.

Emboss

To press an image into paper so it lies above the surface. Also called cameo and tool.

Emulsion

Casting of light-sensitive chemicals on papers, films, printing plates and stencils.

Encapsulated PostScript file (EPS)

Computer file containing both images and PostScript commands, a known file format usually used to transfer post script information from one program to another. Abbreviated EPS file.

Engraving

Printing method using a plate, also called a die, with an image cut into its surface.

Feeding Unit

Component of a printing press that moves paper into the register unit.

Fine Screen (High Line Screen)

Screen with ruling of 150 lines per inch (80 lines per centimeter) or more.

Finished Size

Size of product after production is completed, as compared to flat size. Also called trimmed size.

Flexography

Method of printing on a web press using rubber or plastic plates with raised images. Also called aniline printing because flexographic inks originally used aniline dyes. Abbreviated flexo.

Flood

To print a sheet completely with an ink or varnish. flooding with ink is also called painting the sheet.

Foil Stamp

Method of printing that releases foil from its backing when stamped with the heated die. Also called block print, hot foil stamp and stamp.

Fold Marks

With printed matter, markings indicating where a fold is to occur, usually located at the top edges.

Foldout

Gatefold sheet bound into a publication, often used for a map or chart. Also called gatefold and pullout.

For Position Only

Refers to inexpensive copies of photos or art used on mechanical to indicate placement and scaling, but not intended for reproduction. Abbreviated FPO.

Four-color Process Printing

Technique of printing that uses black, magenta, cyan and yellow to simulate full-color images. Also called color process printing, full color printing and process printing.

Gang

To reproduce two or more different printed products simultaneously on one sheet of paper during one press run. Also called combination run.

Gate Fold

A sheet that folds where both sides fold toward the gutter in overlapping layers.

Gathered

Signatures assembled next to each other in the proper sequence for binding, as compared to nested. Also called stacked.

Ghosting

(1) Phenomenon of a faint image appearing on a printed sheet where it was not intended to appear. Chemical ghosting refers to the transfer of the faint image from the front of one sheet to the back of another sheet. Mechanical ghosting refers to the faint image appearing as a repeat of an image on the same side of the sheet. (2) Phenomenon of printed image appearing too light because of ink starvation.

Gloss

Consider the light reflecting on various objects in the printing industry (e.g., paper, ink, laminates, UV coating, varnish).

Gravure

Method of printing using metal cylinders etched with millions of tiny wells that hold ink.

Gray Scale

Strip of gray values ranging from white to black. Used by process camera and scanner operators to calibrate exposure times for film and plates. Also called step wedge.

Gripper Edge

Edge of a sheet held by grippers on a sheetfed press, thus going first through the press. Also called feeding edge and leading edge.

Gutter

In the book arena, the inside margins toward the back or the binding edges.

Halftone

(1) To photograph or scan a continuous tone image to convert the image into halftone dots. (2) A photograph or continuous-tone illustration that has been halftoned and appears on film, paper, printing plate or the final printed product.

Halftone Screen

Piece of film or glass containing a grid of lines that breaks light into dots. Also called contact screen and screen.

Head-to-tail

Imposition with heads (tops) of pages facing tails (bottoms) of other pages.

Hickey

Spot or imperfection in printing, most visible in areas of heavy ink coverage, caused by dirt on the plate or blanket. Also called bulls eye and fish eye.

Image Area

The actual area on the printed matter that may have ink applied.

Imagesetter

Laser output device using photosensitive paper or film.

Imposition

Arrangement of pages on mechanicals or flats so they will appear in proper sequence after press sheets are folded and bound.

Impression

(1) Referring to an ink color, one impression equals one press sheet passing once through a printing unit. (2) Referring to speed of a press, one impression equals one press sheet passing once through the press.

Impression Cylinder

Cylinder, on a press, that pushes paper against the plate or blanket, thus forming the image. Also called impression roller.

Imprint

To print new copy on a previously printed sheet, such as imprinting an employee's name on business cards. Also called surprint.

Ink Fountain

Reservoir, on a printing press, that holds ink.

Ink Jet Printing

Method of printing by spraying droplets of ink through computer-controlled nozzles. Also called jet printing.

Inserts

Within a publication, an additional item positioned into the publication loose (not bound in).

Intaglio Printing

Printing method whose image carriers are surfaces with two levels, having inked areas lower than noninked areas. Gravure and engraving are the most common forms of intaglio. Also called recess printing.

K

Abbreviation for black in four-color process printing. Hence the 'K' in CMYK.

Kiss Die Cut

To die cut the top layer, but not the backing layer, of self-adhesive paper. Also called face cut.

Letterpress

Method of printing from raised surfaces, either metal type or plates whose surfaces have been etched away from image areas. Also called block printing.

Lithography

Method of printing using plates whose image areas attract ink and whose nonimage areas repel ink. Nonimage areas may be coated with water to repel the oily ink or may have a surface, such as silicon, that repels ink.

Loupe (loop)

Lens built into a small stand. Used to inspect copy, film, proofs, plates and printing. Also called glass and linen tester.

Magenta

One of the four process colors.

Makeready

(1) All activities required to prepare a press or other machine to function for a specific printing or bindery job, as compared to production run. Also called setup. (2) Paper used in the makeready process at any stage in production. Makeready paper is part of waste or spoilage.

Male Die

Die that applies pressure during embossing or debossing. Also called force card.

Margin

Imprinted space around the edge of the printed material.

Mark-Up

Instructions written usually on a “dummy.”

Matte Finish

Flat (not glossy) finish on photographic paper or coated printing paper.

Mechanical

Camera-ready assembly of type, graphic and other copy complete with instructions to the printer. A hard mechanical consists of paper and/or acetate, is made using paste-up techniques, and may also be called an artboard, board or paste-up. A soft mechanical, also called an electronic mechanical, exists as a file of type and other images assembled using a computer.

Metallic Ink

Ink containing powdered metal or pigments that simulate metal.

Mock Up

A reproduction of the original printed matter and possibly containing instructions or direction.

Moiré

Undesirable pattern resulting when halftones and screen tints are made with improperly aligned screens, or when a pattern in a photo, such as a plaid, interfaces with a halftone dot pattern.

Mottle

Spotty, uneven ink absorption. Also called sinkage. A mottled image may be called mealy.

Nested

Signatures assembled inside one another in the proper sequence for binding, as compared to gathered. Also called inset.

Offset Printing

Printing technique that transfers ink from a plate to a blanket to paper instead of directly from plate to paper.

Overprint

To print one image over a previously printed image, such as printing type over a screen tint. Also called surprint.

Panel

One page of a brochure, such as one panel of a rack brochure. One panel is on one side of the paper. A letter-folded sheet has six panels, not three.

Parallel Fold

Method of folding. Two parallel folds to a sheet will produce 6 panels.

Paste-up

To paste copy to mounting boards and, if necessary, to overlays so it is assembled into a camera-ready mechanical. The mechanical produced is often called a paste-up.

Perfect Bind

To bind sheets that have been ground at the spine and are held to the cover by glue. Also called adhesive bind, cut-back bind, glue bind, paper bind, patent bind, perfecting bind, soft bind and soft cover. See also Burst Perfect Bind.

Perforating

Creating a line of small dotted holes for the purpose of tearing-off a part of a printed matter (usually straight lines, vertical or horizontal).

Pica

A unit of measure in the printing industry. A pica is approximately 0.166 in. There are 12 points to a pica.

Photoengraving

Engraving done using photochemistry.

Pixel

Short for picture element, a dot made by a computer, scanner or other digital device. Also called pel.

Planographic Printing

Printing method whose image carriers are level surfaces with inked areas separated from noninked areas by chemical means. Planographic printing includes lithography, offset lithography and spirit duplicating.

Plate

Piece of paper, metal, plastic or rubber carrying an image to be reproduced using a printing press.

Platemaker

(1) In quick printing, a process camera that makes plates automatically from mechanicals. (2) In commercial lithography, a machine with a vacuum frame used to expose plates through film.

Pleasing Color

Color that the customer considers satisfactory even though it may not precisely match original samples, scenes or objects.

PMS

Obsolete reference to Pantone Matching System. The correct trade name of the colors in the Pantone Matching System is Pantone colors, not PMS Colors.

Post Bind

To bind using a screw and post inserted through a hole in a pile of loose sheets.

Prepress

Camera work, color separations, stripping, platemaking and other prepress functions performed by the printer, separator or a service bureau prior to printing. Also called preparation.

Preprint

To print portions of sheets that will be used for later imprinting.

Press Check

Event at which makeready sheets from the press are examined before authorizing full production to begin.

Printer Spreads

Mechanicals made so they are imposed for printing, as compared to reader spreads.

Printing Plate

Surface carrying an image to be printed. Quick printing uses paper or plastic plates; letterpress, engraving and commercial lithography use metal plates; flexography uses rubber or soft plastic plates. Gravure printing uses a cylinder. The screen printing is also called a plate.

Printing Unit

Assembly of fountain, rollers and cylinders that will print one ink color. Also called color station, deck, ink station, printer, station and tower.

The colors used for four-color process printing: yellow, magenta, cyan and black.

Proof

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

Proofreader Marks

Standard symbols and abbreviations used to mark up manuscripts and proofs. Also called correction marks.

Raster Image Processor (RIP)

Device that translates page description commands into bitmapped information for an output device such as a laser printer or imagesetter.

Reader Spread

Mechanicals made in two page spreads as readers would see the pages, as compared to printer spread.

Register

To place printing properly with regard to the edges of paper and other printing on the same sheet. Such printing is said to be in register.

Register Marks

Cross-hair lines on mechanicals and film that help keep flats, plates, and printing in register. Also called crossmarks and position marks.

Relief Printing

Printing method whose image carriers are surfaces with two levels having inked areas higher than noninked areas. Relief printing includes block printing, flexography and letter press.

Reverse

Type, graphic or illustration reproduced by printing ink around its outline, thus allowing the underlying color or paper to show through and form the image. The image 'reverses out' of the ink color. Also called knockout and liftout.

RGB

Abbreviation for red, green, blue, the additive color primaries.

Right Reading

Copy that reads correctly in the language in which it is written. Also describes a photo whose orientation looks like the original scene, as compared to a flopped image.

Rotary Press

Printing press which passes the substrate between two rotating cylinders when making an impression.

Saddle Stitch

To bind by stapling sheets together where they fold at the spine, as compared to side stitch. Also called pamphlet stitch, saddle wire and stitch bind.

Satin Finish

Alternate term for dull finish on coated paper.

Score

To compress paper along a straight line so it folds more easily and accurately. Also called crease.

Screen Angles

Angles at which screens intersect with the horizontal line of the press sheet. The common screen angles for separations are black 45 degree, magenta 75 degree, yellow 90 degree and cyan 105 degree.

Screen Density

Refers to the percentage of ink coverage that a screen tint allows to print. Also called screen percentage.

Screen Printing

Method of printing by using a squeegee to force ink through an assembly of mesh fabric and a stencil.

Screen Ruling

Number of rows or lines of dots per inch or centimeter in a screen for making a screen tint or halftone. Also called line count, ruling, screen frequency, screen size and screen value.

Screen Tint

Color created by dots instead of solid ink coverage. Also called Benday, fill pattern, screen tone, shading, tint and tone.

Separations

Usually in the four-color process arena, separate film holding images of one specific color per piece of film. Black, Cyan, Magenta and Yellow. Can also separate specific PMS colors through film.

Serigraphic Printing

Printing method whose image carriers are woven fabric, plastic or metal that allow ink to pass through some portions and block ink from passing through other portions. Serigraphic printing includes screen and mimeograph.

Sheetfed Press

Press that prints sheets of paper, as compared to a web press.

Shingling

Allowance, made during paste-up or stripping, to compensate for creep. Creep is the problem; shingling is the solution. Also called stair stepping and progressive margins.

Side stitch

To bind by stapling through sheets along, one edge, as compared to saddle stitch. Also called cleat stitch and side wire.

Signature

Printed sheet folded at least once, possibly many times, to become part of a book, magazine or other publication.

Spine

Back or binding edge of a publication

Spiral Bind

To bind using a spiral of continuous wire or plastic looped through holes. Also called coil bind.

Spot Color

One ink applied to portions of a sheet, as compared to making images using CMYK

Spread

(1) Two pages that face each other and are designed as one visual or production unit. (2) Technique of slightly enlarging the size of an image to accomplish a hairline trap with another image.

Standard Viewing Conditions

Background of 60 percent neutral gray and light that measures 5000 degrees Kelvin the color of daylight on a bright day. Also called lighting standards.

Substrate

Any surface or material on which printing is done.

Subtractive Color

Color produced by light reflected from a surface, as compared to additive color. Subtractive color includes hues in color photos and colors created by inks on paper.

SWOP

Abbreviation for specifications for web offset publications, specifications recommended for web printing of publications.

Tagged Image File Format

Computer file format used to store images from scanners and video devices. Abbreviated TIFF.

Thermography

Method of printing using colorless resin powder that takes on the color of underlying ink. Also called raised printing.

Tint

Screening or adding white to a solid color for results of lightening that specific color.

Tip In

Usually in the book arena, adding an additional page(s) beyond the normal process (separate insertion).

Trap

To print one ink over another or to print a coating, such as varnish, over an ink. The first liquid traps the second liquid. See also Dry Traps and Wet Traps.

Trim Size

The size of the printed material in its finished stage (e.g., the finished trim size is 5 1/2 x 8 1/2).

Unsharp Masking

Technique of adjusting dot size to make a halftone or separation appear sharper (in better focus) than the original photo or the first proof. Also called edge enhancement and peaking.

Up

Term to indicate multiple copies of one image printed in one impression on a single sheet. "Two up" or "three up" means printing the identical piece twice or three times on each sheet.

UV Coating

Liquid applied to a printed sheet, then bonded and cured with ultraviolet light.

Varnish

Liquid applied as a coating for protection and appearance.

Viewing Booth

Small area or room that is set up for proper viewing of transparencies, color separations or press sheets. Also called color booth. See also Standard Viewing Conditions.

Vignette

Decorative design or illustration fade to white.

Vignette Halftone

Halftone whose background gradually and smoothly fades away. Also called degrade.

VOC

Abbreviation for volatile organic compounds, petroleum substances used as the vehicles for many printing inks.

Web Break

Split of the paper as it travels through a web press, causing operators to rethread the press.

Web Press

Press that prints from rolls of paper, usually cutting it into sheets after printing. Also called reel-fed press. Web presses come in many sizes, the most common being mini, half, three quarter (also called 8-pages) and full (also called 16-pages).

Window

(1) In a printed product, a die-cut hole revealing an image on the sheet behind it. (2) On a mechanical, an area that has been marked for placement of a piece of artwork.

Wrong Reading

An image that is backwards when compared to the original. Also called flopped and reverse reading.