



THE WHOLE A – Z GLOSSARY

“A” Sizes

Series of finished trimmed sizes in the ISO International Paper Sizes range. See page 39.

Adhesive Binding

Style of unsewn binding in which the backs of gathered sections are cut off and the leaves are held together at the binding edge by glue. Also referred to as perfect bound.

Advance Sheets/ Copies

Folded and collated sheets given to the client for approval before binding. Also referred to as hand-mades.

Against The Grain

At right angles to the direction of the grain of the paper. In practice folding of printed material should be with the grain direction to avoid unsightly cracking, otherwise creasing may be a necessary.

Aqueous Coating

Water based coating applied in line by a specialised unit on a printing press to protect and enhance the printed surface. Aqueous dries instantly which allows post production processes to begin immediately, i.e. trimming, folding.

Artwork

All original copy, including type, photos and illustrations intended for printing.

Art Paper

Paper that has received a coating of china clay. It has a very smooth surface which may be matt, but is usually shiny.

Authors Corrections

Corrections made by the customer after copy or artwork has been given to the printer. The change could be in copy, specifications or both, altering it from the original copy.

“B” Sizes

The ISO International Paper Sizes intended primarily for posters, wall charts and similar items where the difference between each A size represents too large a jump. See page 39.

Back Margin

The white area of page between the spine and the printed image.

Banding

- (1) A strip of paper, rubber or plastic tied around a number of finished items to keep them in sets, ie banded in 25's.
- (2) A printing problem in a solid or screen area that goes from dark to light.

Bitmap

Image formed by different densities of pixels in a rectangular grid.

Blanket

In offset printing, a rubber surfaced fabric that is clamped around a cylinder. The image is transferred from the plate to the blanket, and from there, transferred to the paper.

Bleed

Printed image designed to run off the edge of the paper. The bleed allowance is usually 3mm beyond the trimmed size.

Blocking

To make an impression on paper or board from a block of design or lettering, the impression may be filled with a foil, or without (referred to as blind embossing).

Board

A cellulose based material which is usually above 200 gsm.

Book Jacket

Printed board or paper wrapper used to cover a paperback or cased book.

Book Paper

General term used to define a group of papers having common physical characteristics that, in general, are most suitable for book production.

Brightness

The reflectance or brilliance of a paper.

Bromide

Photosensitive paper coated with silver bromide on which an image is created.

Buckram

A heavy binders' cloth made from coarse thread. Available in a range of colours.

Bulk

Relative thickness of a sheet or sheets of paper. Measured by caliper, volume or papers per inch. Not to be confused with the weight, two papers of varying thickness, may have the same weight.

Burn Out

An opaque mask used in plate making to clean up areas of printing plate where there might be unwanted images when a plate is made from more than one exposure.

Burst Binding

Method of unsewn adhesive binding widely used on paperbacks, in which the back fold is burst through (nicked) in short lengths during folding so that the glue can reach each leaf as well as section without having to remove the usual 3mm as in perfect binding.

Due to the fact that each leaf and section is adhered with the glue, burst binding is considered to be a more robust form of binding than perfect binding, unless PUR glue is utilised.

As folded sheets are required to burst through, this method of binding does not lend itself to digital print processes.

Butt Register

Register where ink colours meet precisely without overlapping or allowing space between. Also called butt fit.

Caliper

The thickness of paper. Also a device on a sheet fed press that detects double sheets or on a binding machine that detects missing signatures or inserts.

Camera Ready

Type and/or artwork that has been pasted into position to be photographed for plate ready film.

Case Binding

To bind using glue to hold signatures together into a case made of binder board covered with fabric, plastic or leather. Also called cloth edition, hard bind or hard cover. Often case bound books will also have folded signatures sewn together forming a book block, before gluing into a case; this offers extra robustness to the book.

Cast Coated Paper

A high gloss finish on both or one side of paper or board.

Catch Up

An effect when an image occurs in what should be a non image area of a plate due to water/ink imbalance.

Chalking

Drying problem which with some ink/paper combinations, leaving loose pigment on the surface.

Choke (Choking)

When trapping colour closing the open spaces in a graphic to be filled with another colour. Technique of slightly reducing the size of an image to create a hairline trap or outline. This is done to compensate for minor paper movement on the press.

Chromalin

A type of colour proof, produced from colour separated film, used to give an indication of how the full colour printed page will look for both colour and content.

Chromalins are capable of producing proofs in both process and special colours. As special colours for chromalin proofing are generated via a process of mixing powders to achieve the desired special colour, they are indicative only and are not an exact simulation.

With the introduction of CTP technology, chromalins have been superseded by digital proofing processes.

Colour Proof

A colour reproduction of a job to show intended content and/or colour prior to 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.

CMYK

The acronym for the four process colour inks: Cyan, Magenta, Yellow and Black.

The process colours cyan, magenta, yellow and black are combined in varying amounts to represent colours in an original image. K is used for black to avoid confusion with blue.

Computer to Plate (CTP)

A process where printing plates are imaged directly from computer files via a platesetter, without the intermediate step of creating separation film or traditional plate making. This process results in lower costs, while shortening the amount of time needed to get a job on the press, while also offering a higher level of quality in the case of metal plates.

While polymer plates are produced via some CTP systems, the level of quality offered by metal plates is considered to be of far superior quality for print production.

Computer to Press

A printing system that is capable of rapidly changing the images it is printing on the press without the use of removable plates.

Coated Paper

Paper that has received a clay coating on one or both sides, such as art paper and cast coated papers. Improves reflectivity and ink hold out.

Colour Bar

A coloured strip in various percentages on the back edge of the sheet which enables the printer to check by eye or instrument the amount and density of ink needed.

Colour Correction

Alteration to the colour values of an illustration to achieve a desired result.

Colour Management Systems

Electronic characterisation, calibration and control systems that help to assure colour consistency and accuracy throughout the print production process from scanning through previewing on screen and proofing to reproduction on the press.

Colour Matching System

Method of colour specification by matching the colour required to one in a swatch of colours. Each colour in the swatch will have its ink mix formula described. An example of this is the Pantone Matching System (PMS).

Colour Separation

Separating full colour into the four process colours by means of scanning or filters, resulting in four films/plates for printing.

Compositor

Also referred to as the typographer. The individual who sets type, originally by hand, but now by all methods.

Continuous Tone

An image of the four colours of a separation before it is broken into dots.

Contrast

The level of variation in tone or density between the highlight (lightest) and shadow (darkest) areas.

Creep

The shifting position of the page in a saddle stitched book, which moves the inside signatures or pages away from the spine, effectively reducing the page size progressively towards the centre of the book.

Printers need to allow for this creep by offsetting the pages towards the spine by a set amount dependant on paper weight and number of pages. This is done automatically at the imposition stage or by manually offsetting individual elements (also known as bulking).

Crop

To eliminate portions of a copy or photograph that are not required.

Crop Marks

Symbols placed in the margin outside the image area that indicate to the printer and the bindery the area to be printed and/or trimmed from the image.

Cure

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

Curl

The distortion of paper due to differences in structure or coatings from one side to the other or from absorption of moisture on the press.

DAM (Digital Asset Management)

Database systems used to track and manage computer files in computer graphics environments.

Deboss

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

Densitometer

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

Density

The weight of tone or colour in any image, measurable by a densitometer.

Die

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

Die-Cutting

The cutting of paper or board with sharp steel rules on a press to give cut outs or folds in printed material.

Digital Printing

A system of printing, which involves bypassing the traditional route of making printing plates and imaging directly from digital data.

An example of black and white digital printing is high-speed laser printing from a “docutech”. The docutech represents a good alternative for short run black and white print production.

Due to the minimal set up time required in the production of digital work, often just a matter of sending the file to the “docutech”, this process offers substantial advantage when timeframes may be tight. Often the first few books can be produced within a matter of hours.

Digital printing generally produces printed sheets in A4 – A3 loose leaf format, therefore finished books may be saddle stitched, perfect bound, comb or wiro bound.

Digital Proofing

Proofing generated by computer rather than a physical object such as film, plates or bromides. Examples include laser proofing, sherpa proofing, iris proofing.

Direct to Plate

Often used as a synonym for computer to plate.

Dot

The individual element of a halftone.

Dot Gain

A phenomenon, which occurs when wet ink comes in contact with paper. As the halftone dots are applied to the paper, the wet ink spreads, causing the dots to increase in size and halftones to appear darker. A number of factors affect dot gain.

Dots Per Inch (DPI)

A measure of the output resolution of a laser printer, image setter, or CTP unit. The higher the DPI of a digital image, the better the resulting printed image. Generally, images for print production should be saved as 350dpi.

Double Coated

Better quality coated papers receive two (and sometimes more) coating on each side.

Draw Down

A strip of ink spread on a sheet of paper with a pallet knife and allowed to dry to show the resulting colour. Often used for special mixes, such as corporate colours to match to when printing.

Drawn on Cover

A paper or board book cover that is attached to the sewn, perfect or burst bound book by gluing the spine.

Drier

A substance added to ink to hasten drying.

Dummy

A sample for a job made up with the actual materials and to the correct size to show bulk, style of binding, spine width etc.

Dust Jacket

Paper wrapper of a book.

Duotone

A duotone is an image printed in two colours.

Dyeline

A printer's photographic proof from film where all colours show as shades of a single colour on white paper. Also referred to as a copy art, blueline, or dylux. The use of dyelines has been superseded by digital proofing processes.

Emboss

A mechanical process for raising an area of paper above the surface.

Emulsion

The chemically treated side of photographic film. (The dull side not the shiny side.) Depending on the printing process involved, film will be requested as "right reading" emulsion up or emulsion down.

End Papers

Lining sheet that attaches the inside pages of a case bound book to its front and back cover. End papers can be plain or printed.

EPS (EPSF)

Encapsulated postscript file. A vector based, computer graphics file format developed by adobe systems. EPS is the preferred format for many computer illustrations, because of its efficient use of memory and fine colour control. Not to be confused with postscript.

Feet/Foot Margin

The white area at the bottom of a page between the image and trimmed edge.

Finish

The smooth (or rough) surface given to paper by coating or embossing.

Finishing

All operations post press, such as folding, trimming, binding.

Foil

Plastic film with a gold, silver or metallised colouring used to block designs.

Folio

The typeset page number. Rand hand pages contain odd folios, left hand pages contain even folios.

Foreedge

The edge of a book or pamphlet opposite the back, spine or binding edge.

FPO (For Position Only)

A low resolution image in a document to indicate size and position for the same high resolution image.

Fingerprint

To test a printing press to determine it's exact printing characteristics, such as dot gain, ink density and trapping.

French Fold

A sheet of paper with four pages, printed on one side only, then folded with one right angle fold in half. The inside pages are blank.

FTP (File Transfer Protocol)

The method for uploading and downloading files to/from internet server systems.

Gang

To print two or more finished products on the same sheet during one press run.

Gas Ghosting

The transfer of chemicals through a stack of printed matter, causing images to appear throughout the stack.

Gatefold

The two outside edges of a sheet are folded parallel to meet in the centre. In a double gate fold the front fold section is then folded over the back fold section.

Gather

To assemble folded signatures in the proper sequence ready for binding.

Ghosting

A faint image repeats on a printed sheet where it was not intended to appear.

GIF

An eight bit (256 colours or shades of grey) or less computer file format. Though commonly used in web sites, GIF files are almost never used for professional printing.

Grain Direction

The direction in which most fibres within a paper are aligned. It is best to have the grain direction running parallel with the line of folding.

If printed material is to be overprinted via a laser printer the general requirement will be long grain A4 (the grain runs parallel to the long edge) or short grain A3 (the grain runs parallel to the short edge).

Grammage

The metric basis weight of paper. Weight is expressed in grams per square metre (gsm).

Graphic

A non text item (Illustration or photograph) to be printed.

Gripper Edge

Allowance of extra space on a sheet of paper for the grippers to hold the sheet (this is an unprintable area).

Guillotine

A device used to trim paper or board before or after printing.

Gutter

The margin down the center of a double page spread.

Halftone

A reproduction of a continuous tone image (i.e. a photograph or painting) using fine dots of varying size and spacing to reproduce the shades and textures of the original.

Heatset

Web printing process where non-absorbent paper goes through the press and the ink is dried by heat.

Hexachrome

A proprietary colour separation process, developed by Pantone, that uses six instead of four process colours. (CMYK plus Orange and Green).

Hickie

Printing defect caused by dust (usually from the paper or boards surface) or ink skin holding the paper away from the printing surface. A hickie will give the appearance of a solid spot with a halo which shows on the printed sheet as a blemish. A hickie is particularly noticeable in solids.

Highlight

The lightest area of a photograph that has the smallest or fewest dots when made into a halftone.

House Stock

Paper kept in house by the printer which is suitable for a wide variety of printing applications.

HTML (Hyper Text Markup Language)

A language used to format and link (markup) text for display in internet browser applications.

Hyperlink

An indexed piece of text which, when clicked with a pointing device (i.e. a mouse) prompts new information to be loaded to the viewers computer system.

Imagesetter

A high resolution device that prints directly to plate ready film.

Imposition

The process of positioning multiple pages on a flat sheet of paper to be printed at one time, which when folded will read consecutively.

Imprint

This page holds the publishers name, an ISBN number, credits, copyright and national library details.

Insert

A section of a book printed separately, perhaps on a different paper, but bound in with that book.

ISBN

International Standard Book Number.

Jacket

Paper wrapper of a book – also referred to as a dust jacket.

JPEG (Joint Photographic Electronic Group)

A common standard for compressing image data for electronic delivery (CD ROM Digital Cameras or Web). JPEG is not commonly used in printing because of data loss which leads to degraded images.

Kern

To adjust the lateral space between individual letters.

Keyline

A line, often a box around a graphic image.

Kiss Cut

To die cut the top layer but not the backing of a self adhesive paper.

Laid Paper

The smooth wove surface is replaced by a series of translucent watermarked laid lines. These are impressed into the sheet at the time of manufacturing.

Laminate

To bond a plastic film to a printed sheet to protect or enhance it. Encapsulated lamination refers to the casing in of the printed sheet within the laminate.

Landscape

A page format which is wider than it is deep, as opposed to portrait.

Leading

The space, measured in points, between consecutive lines of type. (Originally from the strips of lead placed between lines of hot type.)

Leaf

One sheet of paper in a publication. One leaf equals 2 pages.

Lightfast

An ink which is not affected by exposure to light.

Loose Leaf

Single sheets of paper or board bound together in a ring or similar device, which allows for easy removal or addition of pages.

Lupe (Loupe)

From the german word for magnifying glass, a lens used by photographers, printers, and designers to examine details in printed materials.

Machine Seal

This is a solvent bases coating applied like ink by a printing press to protect the printed surface, and may be a matt (dull) or gloss finish. Machine seals are not suitable for work which is to be digitally overprinted or requires to be written over at a later date, e.g. an application form. Seals can be applied to a full sheet or spot seals can be applied to certain portions of a sheets only.

Make Ready

Preparation of a printing press before the run, setting it up for colour, size, substrate and registration. Finishing processes of binding, folding etc also require make ready processes.

Margin

The blank space around the image area of a page.

Matt Art

Dull finished paper as opposed to gloss.

Midtone

The tonal values of an image that fall midway between the highlight and shadow dots.

Moire

A pattern, which is created when two or more screens are placed over one another.

Monotone

A single colour.

Mottle

Spotty or speckled printing in solid areas caused by poor ink or uneven absorption characteristics in the paper.

Native Files

A file created within layout application software. The file is in a proprietary format only that application can recognise.

Offset Printing (Offset Lithography)

Currently the most common commercial printing method, in which ink is offset from the printing plate to a rubber roller then to paper.

Opacity

Characteristic of paper to impede print from one side showing through to the other.

Overprint

To print over an area which has already been printed on.

PDF (Portable Document File)

A proprietary format developed by Adobe Systems for the transfer of designs across multiple computer platforms.

Perfecting

Printing both sides of a sheet of paper in one pass through the press.

Perfect Binding

Adhesive form of binding. Signatures that are folded will have a section of spine cut off with the back edge roughened, glue will then be applied and the cover attached. As perfect binding is able to utilise loose sheets, it is a suitable method for binding digitally produced work also. Perfect binding does not have the same robustness which a burst bound book offers, unless PUR glue has been utilised.

Perforating

Small holes or slots through paper to allow for a straight-line tear.

Photocopy

A mechanical printing process that uses a light sensitive printing element, electrostatic toner and a heating element to fuse the toner to the paper, bypassing the traditional route of making printing plates.

Pica

A unit of measurement equal to twelve (12) points or one sixth (1/6) of an inch. Used by designers and other graphics professional for its precision.

Pixel

The individual element of a picture captured by a scanner or displayed on a monitor. The brightness and colour of individual pixels and the frequency controls the resolution of the picture. Many pixels together create an image on your screen.

Plate

Image carrier used to transfer ink to a blanket for printed impression onto paper. One printing plate is required for each ink colour printed. Plates for offset printing work on the basis that the imaged areas attract ink and repel water, while the non-image areas attract water and repel ink.

Plate Ready Film

Final photographic film or other artwork used to “burn” printing plates. No additional paste-up or stripping should be required if artwork is actually plate ready.

PMS Colour (Pantone Matching System)

A proprietary colour system for choosing and matching specific spot and process colours.

Point

A unit of measurement equal to 1/12th of a pica or 1/72nd of an inch. Normally used to measure type size or fractions of a pica for the design process.

Polymer Plates

A vinyl-based, short life image carrier plate. Polymer plates are mainly used in the newspaper industry where resolution levels are not as high as that in commercial printing. Newspapers print almost anything from between 70 dpi to 200dpi, whereas, commercial printing requires an ideal minimum of 350dpi.

Postscript

A copyright term for page description language which is used to describe the appearance of a page prepared on a computer to a laser printer, imagesetter, platesetter or digital press.

Postscript File

A data file containing all the information that is needed to print a page or stream of pages. Contains all picture and text data and may include font information and other control data if required.

Preflight

The process of checking that a client's digital files are correctly prepared for production. Includes checking separations, files, fonts, links etc.

Press Pass

When a client checks and approves their job on the press as it is beginning to print.

Printing

The process of applying ink to paper.

Process Colour

The mechanical process of reproducing a full colour image with the three primary subtractive colour inks (CMY – Cyan, Magenta, Yellow) and K – Black. When viewed under a lupe, the individual colour halftone dots can be seen in a process colour image.

Proof

A reproduction of a job to show intended content.

Proof Reading Marks

Standardised codes used for marking up proof corrections.

PUR Glue

A polyurethane glue used in perfect binding. Creates a welded bind considered to be similar strength to sewn binding.

Ream

500 sheets of printing paper.

Recto Page

The right hand or odd numbered page of an open book.

Registration

The quality of alignment of the different coloured inks as they are applied to paper (i.e. if the inks can be seen to overlap improperly or to leave white gaps on the page, the printing is said to be "out of registration" or "poorly registered").

Register Marks

Marks on film/plates that when superimposed during the printing process the rest of the work is in register.

Resolution

Sharpness of an image, usually expressed in dots per inch (dpi) when applied to paper output and lines per inch (lpi) when applied to plate output. This is commonly specified based on the surface type of papers to be printed.

RGB

Red Green Blue, the colours used by a computer monitor to create colour images on the screen.

Most scanners capture their image in RGB values, necessitating the conversion of the image to CMYK values for print reproduction.

RIP (Raster Image Processor)

A computer device which takes the postscript data describing pages and converts it to bitmap format for imaging on an imagesetter, platesetter, digital press, or other imaging device.

Saddle Stitched

A form of binding that uses staple shaped wires through the middle fold of sheets.

Sans Serif

A typeface that has no tails or curled points (serifs) at the ends.

Scanner

Electronic device used to digitise an image. Scans are usually saved as EPS or TIFF files.

Scatter Proof

Proofs of illustrations where the subjects are arranged in a random order.

Score

To make a crease along a straight line on board or paper so that it will fold more easily and accurately. It is preferable to score heavy paper before folding it, in order to avoid cracking.

Screen

Screens are the "tinting" or "shading" of a solid image area. Screens are defined as percentages from 99% to 1% of a solid.

Screen Ruling

A measure of the quality or fineness of the dot structure used to reproduce a halftone image or tint expressed in lines per inch or centimetre.

Script

A typeface that mimics the appearance of hand written text.

Self Cover

A cover made from the same paper as the inside text pages.

Semi Matt

A matt coated paper with a smooth and slightly glossy finish halfway between a matt and a full gloss finish.

Serif

The curls and points that appear as adornments on some type faces.

Set Off

Ink from a printed sheet rubs off or marks the next sheet as it is being delivered. The application of a sealer or aqueous can help alleviate this problem.

Sheet Work

To print one side of a sheet of paper with one image and then be backed up and have the other side of the sheet print with a different image.

Sheet Fed Press

A printing press that uses sheets of paper rather than a continuous roll.

Show Through

The printed image on one side of a sheet being visible on the other side of the sheet under normal light conditions.

Signature (Sig)

All pages of a book or other bound print job, to be printed on a single sheet through a printing press. (Bound pages are always in groups divisible by four, two outside and two inside pages.)

Slug Marks

Numbered indicators printed on a sheet which when folded will show the correct collation order of signatures.

Spot Colour

Where single colours are printed using a specific colour of ink rather than creating it from the process colours. This is applied to printing when process colour is not necessary (i.e. one, two and three colour printing), or when process colours need to be augmented (i.e. a fluorescent pink headline or a metallic tint).

Spiral Bind

A form of binding using a spiral of continuous wire or plastic looped through holes.

Specs

Complete and precise written description of features of a printing job such as type size, paper grade and quantity, printing quality or binding method.

Spot Varnish

Varnish applied only to certain portions of a sheet to highlight those areas.

Tack

The degree of stickiness of a printing ink or varnish.

Tint

A solid colour reduced in shade by screening.

Templates

Predetermined and saved formats for page layout.

Three-Knife Trimmer

A guillotine designed with three knives for trimming books. One trim removes the foreedge, head and footer.

Tip In

To fix a single leaf within a section.

Trim Marks

A mark to indicate where a piece is to be cut.

TIFF

Tagged Image File Format, a bitmapped file format used for the reproduction of continuous tone images such as photographs and illustrations.

Thermography

A printing process that results in raised type similar to engraved printing.

Trapping

Trapping colour is achieved by the use of chokes and spreads, and is the technique of slightly overlapping one image on an adjacent one to avoid white gaps if any paper movement occurs in printing.

Uncoated Paper

Paper with no coating. Not suitable for high quality illustration work.

UV Coating

Ultra Violet finish applied to a printed sheet.

Vector Graphics

Any of a number of graphics formats including EPS(F) and DXF which describe objects on the screen not as coloured pixels but as mathematically defined shapes. Vector graphics can be rescaled to any size without any effect to file size. Typically, vector graphics occupy less disk space than their bitmapped (rasterized) counterparts.

Watermark

Translucent logo in paper created during manufacture.

Wet Proof

Proof produced from final plates, printed onto the intended stock to be used for the main production and showing exact colour reproduction. This process will not however allow for all processes which occur during the main print production such as dot gain, paper stretch etc.

Verso Page

The left hand or even numbered page of a book.

Web Press

A high speed printing press that prints on both sides of a continuous roll of paper. Web presses are used for high volume printing such as newspapers and magazines.

Widow

A single word carried on from a paragraph which appears in the next column, line or page.

Work and Tumble

To print one side of a sheet of paper then turn the sheet over from gripper to back using the same side-lay and plate to print the second side.

Work and Turn

To print one side of a sheet of paper then turn the sheet over from left to right and print the second side. The same gripper and plate are used to print the second side.