

A Sizes

Main series of finished printing trimmed sizes in the 150 international paper size range.

Achromatic printing

Method of colour in which any hue is created from two colours plus black, rather than three. Any extension of under colour removal (UCR)

Additive primaries

Coloured lights in red, green and blue, (RGB) which when combined with each other in equal proportions produce white. Other colours may be produced by mixing different proportions of each light source. Video monitors use this principle to produce colour television images. Input scanner detectors sense red, green and blue components of the scanned image before electronic conversion to printing colour of cyan, magenta, yellow and black. Output transparency recorders generate red, green and blue from input information generally supplied in cyan, magenta and black electronically re-coded to red, green and blue.

Adhesive binding

Style of threadless binding in which the leaves of a book are held together at the binding edge by glue or synthetic adhesive and a suitable lining.

Air-brush

An instrument having a small reservoir to contain liquid ink and so arranged that a controlled current of air is blown over the ink surface which is broken down into a atomised spray and ejected through a nozzle. Used by artists to obtain graduated effects on drawing, photographs and lithographic printing surfaces.

Air-dried

Paper dried by a current of warm air after tub-sizing.

Alignment

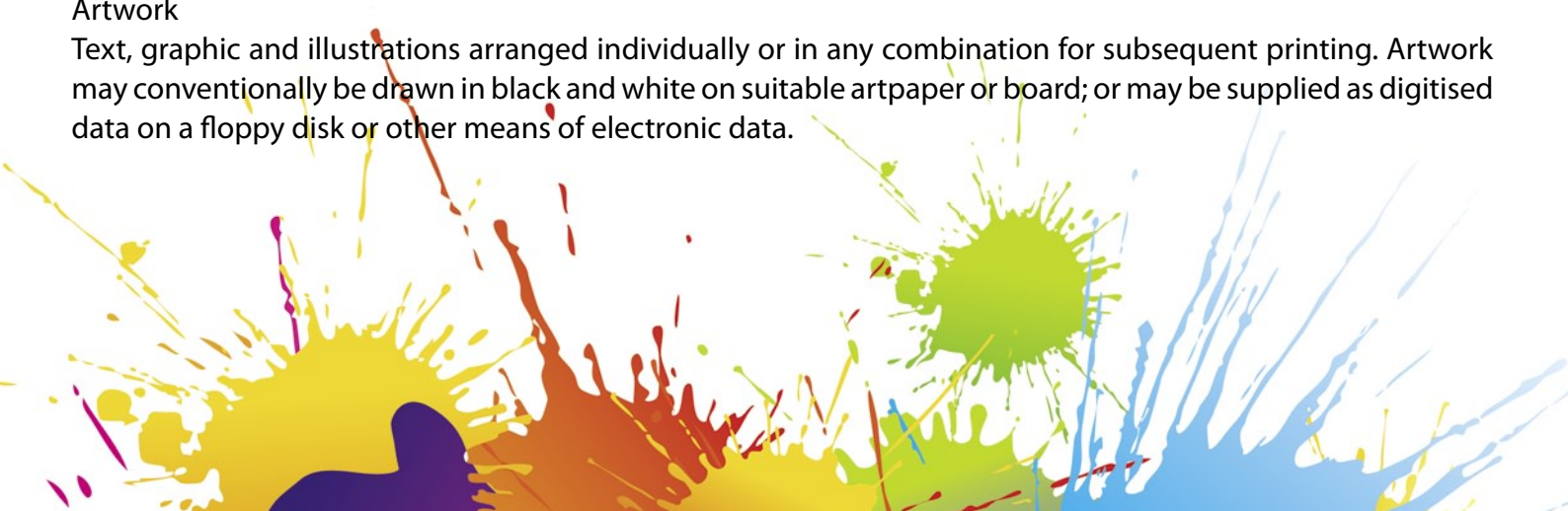
Horizontal positioning of type to ensure that the base of each character is perfectly in line with the text.

Art

Substrate which has received a coating to the base material. It has a very smooth surface, which may be gloss, matt or dull.

Artwork

Text, graphic and illustrations arranged individually or in any combination for subsequent printing. Artwork may conventionally be drawn in black and white on suitable artpaper or board; or may be supplied as digitised data on a floppy disk or other means of electronic data.



Artwork may also be in the form of a full-colour drawing or picture which requires specialist reprographic colour separation. This enables the separation to be printed in the four basic printing process colours (cyan, magenta, yellow and black).

Author's corrections

Corrections made by the author on proofs, that alter the original copy. The cost of making such alterations is charged for, in contrast to printer's errors or house corrections.

B Sizes

ISO International sizes intended primarily for posters, wall charts and similar items where the difference in size of the larger sheets in the A series represents too large a gap.

Back

The back of a book is the binding edge. To back a book is to shape the back of a previously rounded book, so as to make a shoulder on either side against which the front and back covers fit closely.

Backing or release paper

The component of a pressure-sensitive stock which functions as a carrier for the material. The backing readily separates from the adhesive prior to the application of the material to a surface.

Back-up

To print the reverse side of a sheet.

Bit

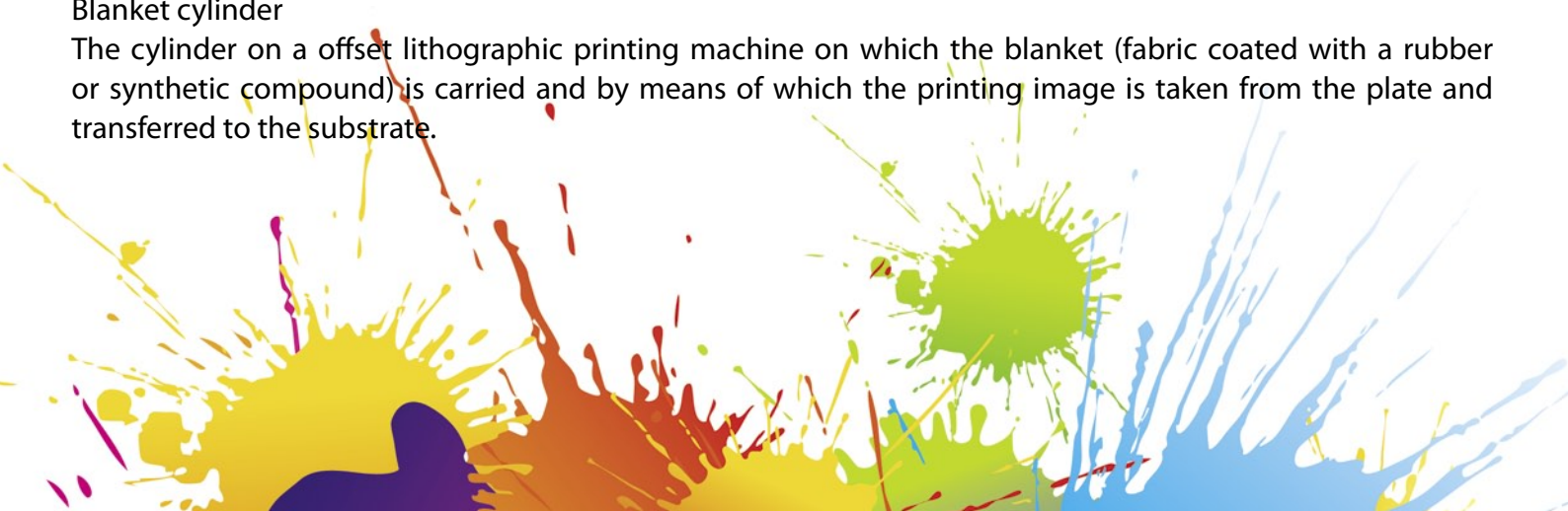
Binary information transfer' or 'binary digit'. The basic unit of information in computer imagesetting; it represents a pulse, electrical charge or its absence. Each bit stands for one binary digit, 0 or 1. Bits are usually grouped together in blocks of eight to make bytes. Most computer operations work on byte-sized pieces of information.

Bitmap

An image arranged according to bit location in columns. Resolution of a Postscript file processed through a RIP will have a bitmap image with the characteristics and resolution of the particular output device (for example, laser printer at 300 up to 1200dpi, imagesetters at 1270dpi up to 5080dpi).

Blanket cylinder

The cylinder on a offset lithographic printing machine on which the blanket (fabric coated with a rubber or synthetic compound) is carried and by means of which the printing image is taken from the plate and transferred to the substrate.



Bleed
Printed matter which runs off the edge of the substrate; also used by the bookbinders to describe over-cut margins and mutilated print.

Blind
Terms applied to a litho plate which has lost its image; also to book covers which are blocked or stamped without the use of ink or metallic effect.

Blind-blocking
Blank impression made on book covers by binders brass, without gold leaf, foil or ink.

Block
In binding, to impress or stamp a design upon the cover. The design can be blocked in coloured inks, gold leaf or metal foil (see blind). In printing a letterpress block is the etched copper or zinc plate, mounted on wood or metal from which an illustrated is printed.

Boards, bristol
A fine quality of cardboard which made be solid by pasting two or more sheets together.

Boards, chip
Inexpensive board made from mechanical wood and waste materials; used unlined for binding cases, rigid boxes, show cards, and white lined cartons.

Boards, mill
A high-grade board, brown in colour, made from rope and other materials, which is very hard, and tough with a good finish. It is used for covers of better quality account and other books.

Boards, paste
Boards which contain two or more laminations of paper having a middle or lower quality.

Boards, pulp
Manufactured from pulp as a homogeneous sheet on a cylinder machine, in a similar manner to paper.

Boards, straw
A board made from straw, and used principally for making the covers of case books and cheap account books.



Body paper

Paper forming the base of coated paper.

Bold

A typeface that is heavier than normal weight, available in most type families.

Bond

Similar to bank paper but heavier, usually supplied in 63gsm and above.

Bound book

A book in which the boards of the cover have first been attached to it, the covering of leather, cloth, or other material begin then affixed to the boards. Bound books are more expensive to produce and much stronger than cased books.

Boxhead ruling

The space at the top of a ruled column for the insertion of printed or written headings for each column.

Broadsheet

Any sheet in its basic size (not folded or cut); also denotes a newspaper size.

Bromide

A photographic paper used in graphic reproduction, phototypesetting and imagesetting on which a photographic image is created (see also PMT).

Bulk

Relative thickness of a sheet or sheets, for example, a bulky paper and a thin paper both of the same weight display different 'bulk'.

Bull's eye (Hickey)

Printing defect caused by a dust particle holding the paper or board away from the printing surface.

Carbonless paper

Paper stock coated on the back and/or front with chemicals which react to form an image when written or typed in.



Carton

A container generally made from paper/board, but sometimes partially or totally from plastic; delivered by the carton manufacturer to a user, either in a flat or collapsed form, for assembly at the packaging point.

Cartridge

A tough, opaque paper with a rough surface. Principally used for guard books, large envelopes, drawing and offset printing.

Case

This represents the cover of a book prepared beforehand for affixing to the book.

Case binding

The binding of printed books, which include leather, cloth and other forms of covering.

Chase

A rectangular iron frame well below type height in which letterpress type and blocks, or cutting and creasing frames are locked in preparation for printing on the machine and certain other operations.

Chemical wood pulp

Pulp that is prepared from chipped wood by treating with chemicals to remove the non-cellulose material. It is used in the better grade of wood pulp paper and boards, and improves the properties of mechanical pulp when the two are mixed: also often referred to as wood free.

Choke

A specific adjustment or distortion whereby the perimeter, in total or in part, of an element is slightly pulled in (choked) towards the centre of the element. Choking of an element is normally used in conjunction with the spreading (see spread) of a neighbouring element to ensure that colour registration standards are achieved. Choking of an element may be performed in a number of ways, manually, photomechanically or digitally, with various computer programmes.

CMYK

Initial letters indicating the printing 'subtractive' primary colours – cyan, magenta, yellow and black.

Coarse screen

A halftone screen up to 35 lines per cm used in preparing illustrations for newsprint and similar surfaced papers.



Coated paper

Paper which has received a coating on one or both sides. Art papers are coated papers, there are also cast-coated, which are high gloss-gloss papers on which the coating has been allowed to harden in contact with a highly finished casting surface.

In addition there are brush-coated papers; chromo papers which are clay-coated in a separate operation from papermaking; roller-coated papers; or machine-coated papers in which the paper is coated during the papermaking process.

Collate

To check through the signatures or pagination of the sections of a book to ensure that they are complete and in the correct sequence for binding. See gathering.

Collating marks

Black step marks (usually 6-pt rule) printed on the back folds or sections and in progressively different positions so that any displacement of sections may be checked after gathering.

Colour control bar

A coloured strip on the margin of the sheet which enables the platemaker and printer to check by eye or instrument the printing characteristics of each ink layer. See calibration bar.

Colouring proofing

This term describes a wide range of techniques which have been developed to reproduce full colour images from the film or digital data available, prior to the actual print run; thus allowing the client, colour separation house and printer to view the 'proofed' result, prior to the actual print run.

Colour separation

In photomechanical reproduction, the process of separating the various colours of a picture usually by colour filters or electronic scanning so that separate printing plates can be produced.

Colour work

Printing more than one colour on a sheet, usually with some reference to register; also printing two or more partially-overlapping colours to obtain a decorative or pictorial effect.



Contact screen

Used to produce a halftone from continuous tone film or artwork using cameras or scanners.

Continuous tone

Term often shortened to contone, it describes images which contain an apparently infinite range of shades and colours smoothly blended to provide a faithful reproduction of natural images.

Contract proof

A coloured, hard copy representation of the printed image, made from the films, or digital data, which will be used to make the final printing plates. The word 'contract' comes from the fact that when signed by the client, a contract is formed, which states that the final printed job should be a close match to the contract proof.

Convertible press

Type of sheet-fed press able to print either on one side of a sheet, or on both sides.

Covering

The process by which a cover is affixed fully to the spine and both sides of a book.

Crease

To mechanically press a rule into heavy paper to enable folding without cracking. See score.

Cut-in index

Style of index in which the divisions are cut into the edge of the book in steps; step index.

Deckle

The width of web (machine width) which a papermaking machine is capable of making paper and board. This is limited by the deckle straps which were originally the moveable wooden frame on the hand-mould used for papermaking.

Deckle edge

The feathery edge occurring round the borders of a sheet of hand-made or mould-made paper, due to the deckle or frame of the mould: double deckle edge means two sides of a machinemade sheet are rough edged.



Densitometer

A device for measuring the closeness of substance at a specific location on film or printed product, either by reflected or transmitted light. Densitometers vary in their sophistication and the number of features provided; such as colour, black and white, read-out memory, computer printout etc.

Descender

Part of the lower-case letter below the x height of the character as in g, q and p.

Dot gain

Refers to the fact that the percentage size of a halftone dot on film (printable dot) changes size as it is transferred from film to printed/substrate. This is dependent/interrelated to the type of film image (negative or positive), method of printing and the substrate used. This change is called 'dot gain percentage', as it will always will be a plus factor, ie 30% dot on the film, 40% printed dot – this increase is referred to 10% dot again. This press dot gain must be anticipated at the film stage and the film dot size reduced to counteract the percentage gain. This is not a linear change as it varies depending on the original film dot size.

Dot matrix

Imaging method in typewriters and computers. Each letter is made up of dots using a matrix of 5 x 7 or greater.

Drawn-on cover

A paper book cover which is attached to the sewn book by gluing the spine.

Dry litho

An offset litho process using a standard press, but with a plate which does not need damping to restrict the ink to the image area.

Desktop publishing (DPT)

A generic title given to the introduction of personal computers (PC's) to typesetting, page composition and image handling. The combination of all these gives electronic control within a single system of what was traditionally a specialist and segmented operation.

Dummy

A sample of a proposed job made up with the actual materials and cut to the correct size to show bulk, style of binding, etc. Also a complete layout of a job showing position of type matter and illustrations, margins etc.



Duotone

A two-colour halftone produced from two halftone images of the same original. Different visual effects can be obtained by using different screen angles, contrast ranges, special screens etc.

Duplex halftones

Two-colour halftone plates made from a monochrome original, the second plate being used as a tint.

Duplex paper

Paper of two qualities or colours which have been brought together and combined while in the wet state on the papermaking machine.

Electrostatic printing

A term used to describe where the printing plate, drum or belt is charged overall with electricity and light is reflected from the non-image areas of the original being copied, destroying the charges in these areas. Toner powder is then applied, which adheres only in the still-charged image area, fusing itself to the paper by heat. See also laser printing.

Embossing

The process of raising, by an unlinked block, letters or designs on card or strong paper.

EPS

A file format, Encapsulated PostScript, used to transfer PostScript image information from one program to another.

Finishing

This covers all operations after printing; also the hand operations of lettering and ornamenting the covers of a book.

Fit

Proportion of space between two or more letters which can be modified (for example, tight fit) by adjusting the set-width.

Flexography

A relief process in which printing is done from rubber or plastic on a web-fed press using liquid ink.



Flush left or right

Type lining up vertically, either to left or right.

Folioing

Numbering progressively by book openings instead of pages, the left and right pages have the same number.

Font

American for fount. Both are pronounced 'font'. See font.

Foredge

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

Formats

Repetition of typographical or other commands, also text material which are determined by design and fed into the computer memory, allowing the keyboard operator to change typeface, measure, etc; also allowing repeated instructions to be done automatically. Formatting is used to program a computer by a single command to simplify repeated changes to text matter after it has been set and printed out – for example, the updating of a price list.

Fount

A set of type characters of the same design (and with hot metal, also the same size) for example, upper and lower case, numerals, punctuation marks, accents and ligatures.

Four – colour machine

A printing machine which prints one side of the substrate in four colours as it passes through the machine.

Four – colour process inks

Inks used in four-colour process printing (yellow, magenta, cyan and black).

GSM

Abbreviation of grams per square metre. A method of indicating the substance of paper or board (whatever the size of paper/board or number of sheets in the package) on the basis of weight in grams per square metre.



Gathering

To place in their correct order the sections or sheets to make up a book.

Graining (in lithography)

Roughening the surface of a metal printing plate by means of brushes, chemical reaction and abrasives so as to obtain a surface which will retain moisture and ink.

Gravure printing

A process in which the printing areas are below the non-printing surface. The recesses are filled with ink and the surplus is cleaned off the non-printing area with a blade before the paper contacts the whole surface and lifts the ink from the recesses.

Grey balance

The condition in colour reproduction where the dot size values of the subjective primaries are balanced to give virtual neutral grey, ie cyan – 60%, magenta – 48% and yellow 46%.

Greyboards

Case boards of a higher quality than chip boards; produced mainly in Holland.

Greyscale

The depiction of grey tones between black and white. A greyscale monitor is able to display grey pixels as well as black and white, but not colour pixels.

Grid

A regularly spaced set of lines in two dimensions to form a series of positional references. In electronic systems they must be used to position accurately text and image information for onscreen page layout.

Guard book

A book with guards in the binding edge to prevent breaking of the back when filled with cuttings, samples, patterns etc.

Gutter

The binding margin of a book.



Halftone image

Represents an image which has had the tones translated into solids and various dot sizes to represent to the eye, a continuous tone result. The visual effect is of different tonal levels depending on the ratio of printed dot area to the page/substrate background.

Halftone screen

Glass plate or film, cross-ruled with opaque lines and having transparent squares; used to split up the image into halftone dots (see contact screen).

Hard copy

Typed or printed copy produced simultaneously with a tape or recording which allows operators to read and correct before photosetting or imagesetting.

Hard disk

A fixed magnetic storage medium in which the data holding element cannot be removed. Hard disks have a very large storage capacity, up to 1000mb and above, enabling data to be rapidly accessed and manipulated.

Hard-set drying

Drying a web or sheet of paper or board by passing it through a drying unit forms part of the machine. Special heat-setting inks have to be used.

Hot-foil

A printing technique using very thin aluminium foil in a variety of metallic colours, such as gold, silver, red and blue. The metallic foil is released from the carrier base onto a substrate by application of heat and pressure from a metal printing plate which bears the image to be hotfoiled.

House corrections

Corrections in galley or page proofs, other than those made by the author.

Image

The ink-carrying areas of a lithographic printing surface plate.

Image master

Photographic original for founts of typeface used in photosetting.



Imagesetter

An output typesetting system which has the ability to combine all the elements of a page – text, tints, graphics, etc – directly onto paper/bromide, film or polyester plate material.

Impose

To plan film or pages prior to platemaking.

Imposition schemes

Plans for the arrangement of the pages of a book so that they will follow in the correct sequence when folded.

Indented

A shortened line of type set over to the right of the normal margin.

Inferior characters and figures

Letters or numbers which are smaller than the text size and are positioned on or below the baseline, also known as subscript.

Ink jet

A non-impact printing process in which droplets of ink are projected onto paper or other material, in a computer-determined pattern.

Inner

An imposition containing the pages which fall on the inside of a printed sheet in the sheetwork – the reverse of the outer forme.

Insert

A piece of paper or card laid between the leaves of a book and not secured in any way.

Insetting

Placing one section inside another resulting in insetted work.

Interleaving

In printing, the placing of sheets between printed sheets as they come from the machine to prevent set-off; also known as slip sheeting. In bookbinding it covers insetting into and folding around the sections of a book different from that used in the general body of the book, such as writing paper and blotting paper; also the alternating of processed and plain sheets, for example, in a duplicate book.



International paper sizes

The standard range of metric paper sizes as per definition of the International Standards Organisation (ISO) and British Standards Institution.

ISDN

This is an acronym for Integrated Services Digital Network – a telephone network service which carries data, voice transmissions by digital means, not analogue.

Justification

The even and equal spacing of words and blocks to a predetermined measure: 'to justify a line' is to space out a line of type to the required measure.

Kerning

The process of altering the space in between type characters to achieve a more aesthetically pleasing arrangement of the letters of a word.

Kettle – stitch

In binding, the stitch at the top and bottom of the spine which connects each signature to the following one.

Key

The outline of a drawing which is transformed or used as a guide in the production of printing plates so that the various colours will register with each other; also relates to the design which acts as the guide for position and registration of the other colours. Further examples of the term include the character key on a typesetting keyboard and to set via a keyboard.

Knocking – up

To make the edges of a pile of paper or board straight, regular or flush.

Laminating

The application of transparent plastic film, usually with a high-gloss finish, to the surface of printed matter to enhance its appearance and to increase its durability.

Landscape

Oblong loose or folded printed sheet, or book, having its long sides at head and foot.



Laser
Light Amplification by Stimulated Emission of Radiation – a fine beam of light, sometimes with considerable energy, used in imagesetting, colour scanning, copy scanning, platemaking, engraving and cutting and crease forme-making.

Laser engraving
The process of engraving an image onto a printing plate or, more typically, a printing cylinder coated with rubber, using an intense laser beam. It is used for continuous patterns where a conventional printing plate join would be revealed in the printed image.

Laser imagesetter - Recorder/plotter
Descriptions identifying the film/plate material output devices of various manufactures. Film exposed at high resolution using laser light source direct from digital information stored on hard disk. The units have a job-index and job-queuing programs as well as manual or automatic film-loading/unloading facilities.

Lay
The position of the print on a sheet of paper or board. Lays (front and side) – the guides or gauges (at front and side) to which paper or board is fed before being printed or otherwise processed on a machine eg folding. Lay edges – the edges of a sheet which are laid against the front and side lays.

Lead
Term covering strips of metal less than type-high, used as general spacing material (thickness: 1-pt, 1.5-pt {thin}, 2-pt {middle}, 3-pt{thick}; also a lead, in all composition, to add a space between lines of type. The term comes from hot metal letterpress printing, in modern setting system it is more often referred to as interlinear spacing.

Leader
A type of character having two, three or four dots in line, used to guide the eye across a space or other relevant matter, as in tables.

Leaf
A sheet of a book, containing two pages one on each side. Thus a section of a book containing 32 leaves has 64 pages.



Letterpress printing

A process in which the printing surface of a metal, plastic, photopolymer or rubber is raised above the non-printing surface. The ink rollers and the substrate touch only the relief printing surface.

Letterset

Offset letterpress printing, using a wrap-round relief plate on a litho press; also called dry offset.

Letterspacing

To increase the standard space between characters to fill a line or enhance the visual look of the words. See kerning.

Ligature

Two or more letters joined together, and forming one type character as fi, fl, ff, ffi, ffl.

Light emitting diode (LED)

A semi-conductor that produces a light when a voltage is applied. In small sizes used in photocomposition/ imagesetting and colour scanning.

Light pen

Light-sensitive stylus used with certain VDU's for design or editing.

Line Block

A relief block produced from a line drawing and without the use of a halftone screen.

Line drawing

A typical drawing which would be produced with pen and brush when using a full charge of ink, thus making lines of comparable photographic value.

Lithographic printing

A process in which the printing and non-printing surfaces are on the same plane and the substrate makes contact with the whole surface. The printing part of the surface is treated to receive a transmit ink to the paper, usually via a blanket (see offset printing), the non-printing surface is treated to attract water and thus rejects ink from the ink roller, which touches the whole surface.

Logo

An image or symbol constructed from shapes, design and letters, designed to represent an organisation, trademark, etc.



Lower case

Term covering small letters of the alphabet as distinct from capitals; also the divided wooden tray used for hot-metal foundry typesetting.

Machine direction

The long way of the paper web (or board) and the direction in which the cellulose fibres tend to lie due to the motion of the papermaking machine. The sheet has stronger physical properties in the machine direction and shows less dimensional variation when subjected to changes in humidity. Also, the direction in which a product is printed in a reel-fed printing machine – for example, the head of the label first along the web, the foot of the label first along the web, wide edge of the label leading along the web, narrow edge of the label leading along the web.

Matt art

An art paper or board with a dull eggshell finish.

Mechanical printing

Any paper containing a proportion of mechanical wood pulp.

Mechanical wood pulp

Produced by grinding wood mechanically; used in cheap papers, such as newsprint, and combined with larger proportions of chemical wood pulp for better qualities.

Mesh (screen printing)

The weave dimensions and angle of the fabric of material used for preparing silk screen stencils. MF (paper)
Abbreviation of machine-finished or mill-finished; paper finished on the paper making machine but not super-calendered.

MG (paper)

Abbreviation of mill-glazed or machine-glazed; applied to a large range of papers which are characteristically rough on one side and are highly glazed on the other.

Montage

Term used in the graphic industry for a number of operations: photomontage – combination and often blending of images; montage of pages – page make-up; montage of film – mounting several colour separation films of one printing colour in register for subsequent transfer to the printing plate.



Numbering at press

To number a job on the printing machine by means of numbering boxes.

Oblong see landscape.

OCR

Optical Character Recognition – typewritten or printed matter capable of being read opto-electronically using a scanner, for subsequent imagesetting/phototypesetting.

Off-line

Not connected – eg a computer printer may be disabled by switching it off-line. Another use is where information entered into a computer is processed at a later time, without the operator being present. Many EPC and graphic systems manipulate the actual data after the job to be done has been set up by an operator. The off-line component of the job often takes much longer than initial set-up. This may be referred to as post processing and forms a major limiting factor to the efficiency of such systems.

Offset printing

A lithographic method of printing in which the ink is first transferred from the image to an offset blanket and then to the stock which may be paper, metal or other material.

Original

The term applied to copy which has been reproduced.

Orthochromatic

A photographic film insensitive to red light; used for monochrome reproduction or on scanners using non-red lasers.

Outer

An imposition containing the first and last pages of a printed sheet in sheetwork; as distinct from inner forme.

Overs

The quantity of unit production, for example, books and sheets, delivered to the customer about the net amount ordered, usually charged at a run-on-rate; also allowance to cover wastage.



Paged

A book is said to be paged when the pages are numbered consecutively; as distinct from folioed.

Palette

A range of colours, accessed on electronic systems from a colour data base and displayed on the screen, used for a specific job. The palette which may consist of colours classified according to the Pantone Matching System or other colour systems, may be updated and changed in seconds.

Panchromatic

A photographic film or plate sensitive to all visible colours of the spectrum.

Pantone

Pantone, Pantone Matching System and PMS + are Pantone Inc's check-standard trademarks for colour standards, colour data, colour reproduction and colour reproduction materials, and other colour related products and services, meeting its specifications, control and requirements.

Paste board

Board made of two or more laminations of paper or board.

Paste - up

Any matter pasted up as copy for photographic reproduction.

Perfect binding

See adhesive binding.

Perfected sheet

A sheet printed in both sides.

Perfecting

Printing the second side on a sheet; backing-up.

Perfector (machine)

A printing machine which prints both sides of the sheet as it passes through the machine.



Perforating-at-press

To perforate a job on the printing machine by means of a perforating rule.

Photolettering

Generally a method of photographically producing display setting of typefaces from film fonts in machines of varying complexity, but not so automated as text phototypesetters.

Photolithography

The process of reproducing an image on metal by photography for lithographic printing.

Photomechanical transfer (PMT)

A message by which an image is photographed and screened on to a paper negative which by chemical transfer produces a bromide print. This may be reproduced dot-for-dot in platemaking, or pasted-up with unscreened text for further reproduction.

Pigment

Particles that absorb and reflect light and appear coloured to the eye, also refers to the substance that gives ink its colour.

Pixel

From Pic(x)ture element, the smallest part of a picture on a computer screen.

Plate

Any relief, planographic, or intaglio surface, also an illustration of a book printed separately from the text and usually on different paper.

Plate Cylinder

The cylindrical surface on a rotary printing press, which carries the printing surface.

Plate guarded and hooked

A plate secured into a book by means of a narrow strip of paper or linen (guard) pasted on its back edge, and the guard folded in or round a section and sewn with the section.

Platen (machine)

A small direct impression letterpress printing machine, sometimes termed a jobbing platen.



Plates guarded and joined

Two plates joined together by means of a strip of paper or linen, thus forming four pages which can be included in the sewing of the sections of the book.

Plate hooked on own guard

Two plates joined together by means of a narrow strip of paste down the back edge, so that they can be folded to form a four page section which can be included in the sewing of the sections of a book.

PMT

See photomechanical transfer.

Point system

The use of a typographic standard 12-pt pica of 4.23mm to which all other measurements are referred.

Postscript

A Page Description Language (PDL) developed by Adobe, which describes the contents and layout of a page. PostScript also serves as a programming language whereby the PostScript code is executed by a PostScript RIP in the output device in order to produce a printout or film containing the page.

Pre – sensitised plate

A printing plate recoated for direct exposure, made in positive or negative form.

Printer

The unit that prints out information from a computer, and can take the form of a daisy wheel, dot matrix, laser, inkjet or thermographic device.

Printing cylinder

See plate cylinder.

Process colours

The printers traditional subtractive primary colours; cyan, magenta, yellow and black.

Progressive proofs

A set of proofs showing each plate of a set printed in its appropriate colour and in registered combination to act as a guide for the printer.



Proof
A version of a document or colour illustration produced specifically for the purpose of review prior to reproduction.

Radiation drying
Accelerated drying of specially formulated inks and varnishes by an infra-red (IR), ultra-violet (UV) or electron beam radiation.

Raster
The method used in most imagesetters and VDU's to 'draw' the image, each image being made to a series of parallel, or rastered, lines which are switched on and off as they cross the image area. The alternative method is to use vectors.

Register
The printing of two or more plates in juxtaposition so that they complete a design if they are printed on the same side of the sheet or back up accurately if printed on opposite sides of the sheet.

Register marks
Marks placed in the same relative position on sets of printing plates so that when the marks are superimposed in printing the work falls into the correct position.

Reverse leading
A setting function allowing the film/paper to be moved in the opposite direction to normal, thus achieving typographical effects, such as in multicolumn work or maths setting.

RGB
The abbreviation of red, green, blue (the additive primary colours) as opposed to Y, M, C and (K), (the subtractive primary colours).

Right reading
Paper/film, positive/negative from a image/phototypesetter which can be read in the usual way, that is left to right.



RIP

Acronym for Raster Image Processor. PC – based graphic workstations usually produce files in a very compact form based on vector definitions. However, these are not directly suitable for output as all plotters and scanning systems need raster data to operate. RIP technology provides the link between vector and raster systems. PostScript is an example of a vector data generator.

Rosette

The pattern created when all four-colour halftone screens are placed at the traditional angles.

Run – through

A term used in ruling where the lines run from one edge of the paper to the opposing edge without a break.

Saddle – wire stitching

To stitch with wire through the back of folded work.

Scanner

Electronic colour scanners produce, from colour transparencies or colour copy, colour corrected screened separations for the four printing ink colours; specialist scanner systems, linked to engraving heads are also available, for generating gravure cylinders.

Score

To partially cut/crease with a rule into heavy paper or board to break the grain and to enable easier folding.

Screen printing

Often called silk screen printing from the material formerly used to the screen. A stencil process with the printing and non – printing areas on one surface. The printing (image) area is open and produced by various forms of stencil. The substrate is placed under the screen and ink is passed across the top of the screen and forced through the open (printing) areas on to the substrate below.

Screen ruling

The number of halftone dots per lineage inch or centimetre.

Section

A folded sheet of paper forming part of a book; sections are sometimes made of insetted folded sheets of four, eight, 16 or more pages.



Separation

Term used by the reprographic industry to describe the films which represent the yellow, magenta, cyan and black content of an image; by printing these four separations one on top of the other, most of the mixed colours of the image can be regenerated in the printing process.

Set

The width of a type character. In the Monotype unit system, the width (set) of the widest character (em) of a font is measured in points and sub-divided into units, which are one eighteenth of the set. All characters are multiples of units of their own set and their location in the matrix case is determined accordingly. In modern image/photosetting systems the units are finer eg Monotype units are one ninety-six of the set.

Sew

To fasten the sections of a book together by passing thread through the centre fold of each section in such a way as to secure it to the slips: in distinction from stitch.

Sheet – fed rotary

A printing machine on which the printing surface is fixed around a cylinder.

Sheet work

A certain number of pages are imposed in two formes, one printed on one side and the other on the reverse side (backing up) – inner and outer – each backed – up sheet producing one perfect copy; also sometimes known as work-and –back.

Shrink wrapping

Method of packing printed products by surrounding them with plastic, then shrinking by heat.

Side notes

Short lines of matter set in the margins.

Side stitching

To stitch through the side from front to back at the binding edge with thread or wire. See stabbing.



Signature

The constructive number or letter which is printed at the foot of the first page of a section to enable a binder to check the position and completeness of the sections. Signatures are often indicated by printing a rule in the back of each section so that when the sections are folded and gathered the signatures appear 'stepped' on the back fold.

Size

Resin or other sizing material included in the furnish of the paper to bind the fibres and loading together and to provide greater resistance to ink and greater strength in the sheet.

Slitting

Term which covers cutting a sheet or web into two, or more parts, after it is printed and before it is delivered.

Software

The programs that enables the computer to perform its tasks.

Spoilage

Term covering unprofitable materials and labour, the cost of which cannot be charged to a specific customer.

Spot colour

Any area of colour that is not printed using CMYK process set; coloured areas reproduced using self-coloured inks, such as PMS (Pantone) inks.

Spread

The process generally carried out enlarging the width of line work. The inverse function, choke, is used to reduce the width of the line work by using the same process but from the positive image. This is done to ensure that there is no gap between the linework and the surround area. The line work now larger, spreads over from its original area to give an overlay, simplifies the printing process by reducing the need for absolute accuracy of the press; also helping to compensate for shrinkage and stretch in substrate to be printed. See choke.

Stabbing

To stitch with wire through the side of gathered work at the binding edge.



Stitch
To sew, staple or otherwise fasten together with means of thread or wire the leaves or signatures of a book or pamphlet. The different styles of stitching are: double stitch, where two loops of a single thread are fastened in the centre of the fold, machine stitch, where a lock stitch is made; saddle or saddle-back stitch, where the centre of the fold is placed across the saddle in the machine and wire staples are driven through and clenched on the inside; side stitch, where the thread or wire is stitched through the side of the fold; single stitch, where a single loop is drawn through the centre and tied; wire stitch, in which staples are made, inserted and checked by a machine from a continuous piece of wire, as in saddleback stitch; as distinct from sew.

Stringing
To insert and tie string an hanging cards, catalogues, and other work either singly or in batches.

Strip gumming
To apply, by hand or machine, water-soluble to paper in strips and then to dry.

Stochastic screening
Also known as FM (Frequency Modulate) screening. With conventional halftone screening, the variable dot size formed, creates the optical illusion of various tonal values; however, the dot centre pitch distance is constant. In the case of FM screening system, the dots are randomly distributed to create this tonal change illusion. The greater the number of dots located within a specific area, the darker the resultant tone. The dots produced in this way are usually smaller than conventional halftone dots, resulting in improved definition, although greater care and attention to detail at the platemaking stage.

Thermal printing
Non-impact printing process in which heat is transferred from a digitally-controlled print head to a substrate causing a change in colour.

TIFF
Tagged Image File Format, a file format for exchanging bitmapped images (usually scans) between applications.

Tints
Mechanical shading in the line areas, normally available in 5% steps from 5% to 95%.



Two-colour machine

A printing machine which prints one side of the sheet in two colours as it passes through the machine.

Under-colour removal

UCR. In the four-colour printing process, removal of part of the cyan, magenta and yellow, while adding extra black; its use leads to the overall reduction of the total quantity of ink used.

Unjustified

Type setting where lines of type align vertically on one side, while being ragged on the other; wordspace is kept to a constant value.

Upper case

Term for capital letters (caps), also the type of case which help the capital letters.

Variable space

The space inserted between words to spread and justify the line to the required measure.

Vehicle (of ink)

Medium or varnish in which the pigment of a printing ink is carried or suspended.

Vellum finish

A finish applied to paper and smoother than parchment.

Vignette

This term usually refers to a single dot pattern that may start at 50% dot and gradually decrease to say 5% in a smooth graduation.

Visual

The design concept drawn, either manually or electronically, in colour to provide an impression of the final image.

Web

Paper or board when made is wound on a roll of web. 'In the direction of the web' means in the direction of the run of the paper-making machine when the substrate is made. The direction of the web is important in work printed to register, as paper and board stretches more across the web than in the direction of the web.



Web-fed

Presses which are fed by paper from a reel as distinct from separate sheets.

Web offset

Reel-fed offset litho printing. Three main systems of presses exist blanket-to-blanket in which two plate and two blanket cylinders per unit print and perfect the web of paper or board; threecylinder system in which plate, blanket and impression cylinders operate in the usual manner to print one side of the paper or board; and satellite or planetary in which two, three or four plate and blanket cylinders are arranged around common impression cylinders to print one side of the web in several colours.

Woodfree paper

Any paper made from chemical wood pulp and containing no mechanical wood pulp – see chemical wood pulp.

Word processing

The input, editing, organisation and storage of words/data using computer-based equipment.

Work-and-tumble

When matter is printed in its entirety on both sides of a sheet by using a different gripper edge on the back-up, than on the first printed side. When matter is printed in its entirety on both sides of a sheet by using the same gripper edge.

Wove

Paper which shows an even texture rather than a parallel line pattern.

x-height

The height of lower case letters having neither ascenders nor descenders, as x, m, and u.

