The A-Z of Print - Your free guide to all things print

Art Paper

Paper that has a coating usually of china clay. It can be gloss or matt and is suitable for jobs requiring a fine finish such as colour brochures and annual reports.

Artwork

Originally the physical art (sometimes referred to as camera-ready artwork or mechanical) prepared by the designer and including type, graphics and other originals. This was used by the printer to produce the printing plates. Today the artwork exists almost wholly in electronic form. Photographs and illustrations are inputted to the computer using a scanner. All the elements are assembled using page layout software. Proofs can be made using colour laser or inkjet printers. The computer then separates the 'artwork' and produces high resolution films from which the printing plates are made.

Backed Up

When the reverse of a sheet is printed. See 'Work & Turn'.

Bank

A lightweight paper, usually less than 60gsm.

Bleed

Printed area that extends off the trimmed area. It is not possible to print all the way to the edge of the paper sheet. To achieve this effect it is necessary to print a larger area than is required and then trim the paper down. Typically a designer would allow an extra 3mm of bleed to colour and image areas to allow for a little leeway when trimming.

Blind Embossing

A type of embossing where no ink is used. The design or text is only visible as a raised area on the paper.

Bond

A basic paper, often used for copying or laser printers. The better quality bond papers, with higher rag content, can be used for letterheads.

Calendared Paper

Paper that has passed through hardened rollers during manufacture to produce a smooth surface.

Cartridge Paper

A heavy, textured paper often used for drawing.

CMYK

Shorthand for the colours used in 4-colour process printing. Cyan / Magenta / Yellow / Black (Black is represented by a K)

Coated

Paper that has received a coating to achieve a special finish. See 'Art Paper'.

Collating

The process of assembling the various sections or sheets of a document in the correct order.

Colour Separation

Separating a colour job into the elements required for printing. See 'Four Colour Process Printing'.

Crease

A printed job can be creased mechanically to make folding easier. There are times when you might want a printed piece delivered flat for ease of storage and then do the folding yourself, manually.

Cyan

The blue colour used in Four Colour Process Printing.

CTP – Shorthand for computer to plate.

Previously film separations were played out of an image setter and then exposed under light on to the aluminium printing plates. The fairly standard practice now is to image directly on to the plate using laser technology, this ensures a first generation dot on the plate and resulting in a lot sharper, cleaner and accurate reproduction. Also a lot better for the environment as there is no longer any film produced or chemistry to produce it. Modern CTP systems are nearly all chemistry free.

Digital Printing

These systems work directly from electronic data and avoid the intermediate stage of films. They are very cost effective for short runs. The quality obtainable is not yet up to lithography standards but is improving steadily and is adequate for many purposes.

Drilling

Making the holes in paper for use in a ring binder. Drills can neatly perforate a much greater thickness of paper than can the kind of hole punch you have in the office.

Dummy (1)

A plain white mock-up of a booklet or brochure - not printed but made up using the intended stock. Most printers will make up a dummy if you ask nicely. This is the best way to get a feel for the finished product.

Dummy (2)

A mock-up produced by the designer to show how the finished job will look. This will usually involve colour prints from various sources and will therefore not be on the intended stock.

Duotone

A two-colour halftone sometimes used in Two Colour Printing. Produces a tinted effect using a black & white original.

Embossing

Stamping a design into the paper to produce a raised effect. See 'Blind Embossing'.

Films

Very rarely used in the modern age (see CTP above). Films are produced by an image setter from the artwork. They are used to produce the printing plates by a photochemical process. There is one separated film for each ink used. See 'Four Colour Process Printing

Finishing

Any process that follows the actual printing. Can include folding, creasing, stitching, binding and the like.

Folio

Printer's technical term for what the rest of the world calls a page number.

Four Colour Process Printing

The most common system for producing full colour print. Originally the artwork and originals were separated using filters and four printing plates were produced. The four ink colours are Cyan (Blue), Magenta (Red), Yellow and Black - often referred to as CMYK. Because the inks used are translucent, they can be overprinted and combined in a variety of different proportions to produce a wide range of colours. The vast majority of magazines and colour books are produced using four-colour process.

Gravure

A process where the image area is etched below the surface of the plate (an intaglio process). Gravure is most often used for either very high quality or long run printing. The web version is sometimes referred to as rotogravure.

GSM

Abbreviation for grams per square metre. This indicates the weight of paper or other stock. For example a typical photocopier paper would be 80gsm - a standard letterhead paper might be 100gsm and a postcard would be about 250gsm.

Halftone

The method of producing a range of tones, such as a photograph or tinted area, by dividing the image into a series of dots. Dark areas have relatively big dots, close together. Light areas have small dots surrounded by white space. The number of dots used determines the quality of the image produced. In a newspaper the halftone dots are easily visible to the naked eye - the screen used can often be as coarse as 60 dpi (dots per inch). A colour magazine would typically use a screen of 150 dpi - an art book, 175 dpi or finer. A halftone screen can be applied to a solid colour in order to produce tints of that colour.

Imposition

The layout of pages on the printed sheet so that they are in the correct order when the sheet is folded up and trimmed. Imagine a 16 page A5 leaflet printed on a single SRA2 sheet. The sheet is folded in half three times before trimming and stitching. If you look at the printed, unfolded sheet you will see that, for example, page 2 is adjacent to page 15 and half the pages are upside down! There are many different imposition layouts - some of them very complex.

Insert

Technical term for those irritating adverts that fall to the floor when you open a magazine! An insert is usually not secured to the main book or brochure and is sometimes referred to as a loose insert for obvious reasons.

Intaglio

A printing process where the image is engraved below the surface of the printing plate such as gravure.

Interleaving

Introducing alternate sheets of blank paper between the printed sheets as they come off the press to prevent set off / marking when guillotining.

Lamination

A plastic coating that protects the printed surface and usually gives a high gloss finish. Most paperback books have laminated covers.

Laid Paper

Uncoated paper often used for business stationery which has a textured pattern of parallel lines similar to handmade paper. Compare to 'Wove Paper'.

Landscape

The orientation of the page so that the long edge is along the bottom. Sometimes referred to as horizontal. The opposite of portrait.

Line artwork

Artwork that contains no halftones such as company symbols or simple diagrams.

Lithography

By far the most common type of commercial printing.

Make Ready

The processes involved in getting a press ready for a print run.

Machine Minder

The person who actually runs the press. The quality of a printed job is often dependent on the skill of the machine minder.

Offset Printing

Printing system where the paper does not come into contact with the printing plate. The ink is transferred from the plate to a blanket cylinder and then to the paper.

Originals

The basic elements of the artwork. Includes photographs on print or transparency, illustrations, line artwork etc.

Overs

A quantity of printed material in excess of the amount ordered. It was once usual practice for a printer to charge pro rata for overs. This is much less common nowadays.

Pantone

The brand name of a colour matching system produced by Pantone, Inc. in the USA. A large range of inks are specified and identified by number to produce standard results across the industry. A reference such as PAN199 indicates a colour in the Pantone range, in this case a bright red. In a colour swatch book the number PAN199C would indicate how the colour looks when printed on coated or glossy stock. PAN199U indicates how the same ink appears when printed on uncoated or matt stock. Sometimes the difference can be quite dramatic.

Paper Sizes

The most common system of paper sizes in Europe is the ISO standard. Most people are familiar with the A series which includes A4 the usual letterhead size. The C series is for envelopes - a C4 envelope being ideal for holding an A4 sheet. There is also a B series which provides intermediate sizes for the A series. Two other series which you may come across are RA and SRA which are used by printers. They are slightly larger than the A series to provide for grip, trim and bleed.

PDF (Portable Document Format)

PDF is an open standard for document exchange. The file format created by Adobe Systems in 1993 is used for representing two-dimensional documents in a manner independent of the application software, hardware, and operating system. Each PDF file encapsulates a complete description of a fixed-layout 2D document that includes the text, fonts, images, and 2D vector graphics which compose the documents.

Perfect Binding

A type of book binding where the pages are held in the spine by glue. Many magazines and most paperback books are perfect bound.

Perfecting

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

Portrait

The orientation of the page so that the short edge is along the bottom. Sometimes referred to as vertical. The opposite of landscape.

Postscript

The brand name of a software standard created by Adobe. It is a page description language that is used by most graphics software and output devices to combine text, pictures and graphical elements into an electronic document and create output which can be used by the printer.

Printing Plate

The physical plate that carries the image. These can be made from a variety of materials. At the cheaper end of the market there are paper plates that are designed to be used once and thrown away. They are very economic for short runs such as small quantities of stationery.

Progressives

A set of proofs that show the different inks separately and combined in various permutations.

Proof

A test print produced to show what the finished product will look like. Increasingly popular are digital proofing systems. They are essentially very high resolution colour printers which make use of colour management techniques for their accuracy. Whatever system you choose it is certain that proofing is a good thing which can save a lot of heartache and cost later on.

Register

When printing with two or more colours it is necessary to align the different plates. This is known as register. On the edges of an untrimmed sheet you will see small target shapes called register marks that are used for accurate positioning. A printed piece that is out of register will have an unfocused look.

Run-on

Often when a printing price is quoted it is given as a figure for the basic job plus a figure for additional copies. For example the price may be 2000 copies at £300 with £25 for a 500 run-on. This enables you to calculate a range of prices for different quantities. It is very important to note that the run-on price is for copies printed at the same time as the main run. For instance, in the example given, you could not have 2000 copies today and then expect to have another 500 at some future date for just £25. In many cases the set-up and make ready charges represent a large proportion of the print cost.

Rotogravure

The web version of gravure.

Saddle Stitch

A simple way of assembling a small booklet or magazine with a wire stitch through the fold. You may call it stapling but printers call it stitching.

Scanner

A device for turning a piece of artwork into a digital form. Transparencies, prints and illustrations are scanned so that they can be accessed by software designed for image manipulation and page make-up.

Score

Heavier paper and boards need to be scored with a rule to make folding easier.

Screen Printing

This is a process where the ink is transferred to the printing surface by being squeezed through a fine fabric sheet stretched on a frame. The screen carries a stencil which defines the image area. The process can be manual or mechanical but is most suitable for short runs. Screen printing is usually used for large poster work and display material. It comes into its own when printing to difficult or unusual surfaces such as clothing or plastic objects. It is often referred to as silkscreen printing although the screens are generally made from artificial fibres.

Section

A folded sheet that is assembled with others to make up a book. For example an A2 sheet will provide a section of eight A4 pages when folded twice. A 20-page booklet would therefore require two 8-page sections and one 4-page section. These sections are then saddle-stitched together. Larger booklets of, say, more than sixty pages could be perfect bound.

Set-Off

A printing fault where wet ink transfers from a sheet to the reverse of the next one to land in the stack as it leaves the press creating an undesirable ghost image. To alleviate this a fine layer of starch based powder is sprayed across the sheet as it lands enabling a very fine layer of air to circulate between the sheets (one of the key drying characteristics of litho inks is via oxidization).

Sheet Fed

A press which prints by taking up one sheet at a time. This is the system you are most likely to come across. The opposite of web printing.

Special Colours

This refers to colours which are produced using specially mixed inks. To print colours outside the range of 4-colour process it is necessary to use special inks. If for example the exact colour of a company logo could not be achieved from a CMYK mix then it would be necessary to print a fifth plate with the special ink.

Stock

A general term for any paper or board that is used as a printed surface.

Three Colour Printing

Theoretically it is possible to produce an adequate range of colours using just Cyan, Magenta and Yellow. In 4-colour process printing the black plate adds shade and depth reducing the amount of ink required. Three colour printing may also refer to the use of three special inks or black combined with two specials.

Transparency

The preferred medium for photographs intended for printing. Transparencies generally have sharper images and better colour than photographic prints. The three most common sizes are 'five-by-four', 'two-and-a-quarter' (both in inches) and 35mm - the same size as your holiday slides.

Two Colour Printing

Two colour printing is commonly used for stationery because of its cost effectiveness. The typical design includes a special colour such as a Pantone ink along with black. The special ink is for the 'company colour' for use on the logo and the black is for text. In addition, tints of both inks could be used to produce variations of the colour and greys respectively. For example, if a strong blue is chosen as the main colour then the opportunity exists to have a pale blue tint, perhaps as a background 'ghost' image. A range of greys is also available from tints of black.

Two Colour Machine

A press that prints two colours during one pass through the machine. It

is possible to print four colour process by printing Cyan and Magenta,

changing the plates and then sending the sheets through again to print the

Yellow and Black.

UV Varnishing

A method of adding a gloss finish to printed surfaces. The advantage of UV

varnishing is that it is similar to printing an extra colour and can be applied

to selected areas to produce special effects. The UV refers to the UltraViolet lamp under which the varnished sheets pass for rapid drying (the

faster the varnish dries the glossier it will become).

Web

Nothing to do with the internet! A web printing machine is one that accepts

the paper on a large roll (the web).These are very fast presses and are only

economic for long run and high volume work. Most people have seen

films of newspapers being printed - this is a web process. The majority of

magazines you find in the newsagent have been printed by web.

Work & Turn

When a whole job is printed on one side of sheet, the sheets turned and

printed again using the same plates. For example, a single sheet A4 flyer is

printed with back and front adjacent to each other on one side of an SRA3

sheet. The sheets are flipped over and printed with the same plates again.

When trimmed you have A4 sheets with a different image front and back.

The advantage of this technique is to save a plate change and make-ready

cost. You may also hear the expression Work & Tumble which is so similar

as to only concern the pedantic.

Wove Paper

Uncoated paper often used for business stationery that has no obvious surface texture or pattern. Compare to 'Laid Paper'.

X

Y

Z