



Glossary of Printing Terms

Artwork

Originally the physical format prepared by a designer that included type, graphics and other originals required by the printer to produce the printing plates (sometimes referred to as Camera-Ready Artwork). Today the artwork exists almost wholly in electronic form. All the elements are assembled using page layout software and proofs can be made using colour laser or inkjet printers. At the pre-press stage the artwork is separated into its various colour components and either used to create high resolution films from which the printing plates are made, or sent through a [RIP](#) that in turn utilises [computer to plate](#) technology.

Bank

A lightweight paper, usually less than 60 [gsm](#) in weight used for stationery or forms.

Bleed

The area of ink coverage which extends beyond the trim edge of the required page size. It is not possible to print all the way to the edge of a paper sheet and 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 the colour and image areas to allow for leeway when trimming.

Blind Embossing

A type of [embossing](#) where no ink or foil is used on the impression. The design or text is only visible as a raised area (also known as bas-relief) on the paper. Created using a bespoke [die](#).

Bond

A basic paper, often used for stationery, copying or laser printers.

Calendered Paper

Paper which has passed through hardened rollers during manufacture to produce a smooth, high glaze surface.

CMYK

Shorthand for the colours used in Four Colour Process Printing - Cyan, Magenta, Yellow and Black. When combined in various percentages, these four inks will create an entire spectrum of colours, including those used in colour pictures and photographs.

Coating

An emulsion, varnish or lacquer applied over a printed surface to protect it. Different coatings applied in-line by our Ryobi 524GX can produce a range of finishes, from high gloss to mat, without the need for a secondary process (such as UV varnish or laminate). All of our work is automatically coated to produce a high quality finish, look and feel.

Collating

The process of assembling the various sections or pages of a document in the correct order, usually prior to binding, padding or gluing in sets.

Colour Separation

The process of preparing a print project by separating it into its printing colours. For full-colour work, this would consist of four separations, one for each of the four primary printing colours (cyan, magenta, yellow and black).





Computer to Plate

CTP is a process where an artwork file goes through a box of tricks and is output directly onto a polyester printing plate.

Crease

A printed job can be creased mechanically to make folding easier and cleaner. Ideally every paper above 150gsm should be creased on folds to prevent the ink from cracking - if no ink is present on the folds then 170gsm can be the limit. If required, we can crease and deliver your job flat for ease of storage and leave you to fold manually.

Cromalin

The brand name of a colour *proofing* system produced by Du Pont and consisting of transparent layers laminated in one piece to a backing. Each layer represents the film for one colour. The result is a crisp, bright simulation of the printed product.

Die

A design, letters, or pattern cut in metal for stamping, embossing or for diecutting.

Die-cutting

The process of cutting paper in a shape or design by the use of a wooden die or block in which are positioned steel rules in the shape of the desired pattern, especially used for labels, boxes, tags and containers.

Digital Printing

A method of printing that uses no film or plates, printing directly from a digital file. There are various types of digital printing, mostly used on small quantity runs. Benefits include faster turnaround times, lowered production costs, and the ability to personalize documents. It is frequently used for on-demand or short-run colour printing.

Drilling

Making even, equal holes in paper using a metal drill bit (for use in a ring binder). Drills can neatly perforate a much greater thickness of paper than the office hole-punch!

Dummy (1)

A plain white mock-up of a booklet or brochure made to resemble the final printed product which uses the proposed grade, weight, finish and colour of paper. 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 may involve colour prints from various sources and will therefore not be on the intended stock. Also called a comp.

Duotone

When a photograph is printed using two ink colours it is a duotone. The most common colour combinations are black plus a colour, but duotones can be created using two Pantone ink colours. Usually printed in dark colour for detail and a second plate printed in light, flat tints.

Embossing

Stamping a design into the paper to produce a raised effect. Can be coated in foil or ink to enhance the design. **Deboss** is when the design is sunk into the paper rather than raised.





Films

Films are produced by an image setter from the artwork. They are used to produce printing plates by a photochemical process. There is one separated film for each colour ink used.

Finishing

Any process that follows the actual printing. Can include folding, creasing, collating, stitching and binding. All of the finishing done by A Local Printer is carried out in-house.

Four Colour Printing

Used for producing colour print and based on the principle that any colour is made up of differing proportions of the primary colours blue, red, and yellow.

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 all colour print is produced using four-colour process.

Gravure

A rotary printing process where the image is etched into the metal plate attached to a cylinder. The cylinder is then rotated through a trough of printing ink after which the etched surface is wiped clean by a blade leaving the non-image area clean. The paper is then passed between two rollers and pressed against the etched cylinder drawing the ink out by absorption. Gravure is most often used for either very high quality or long run printing.

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 good letterhead paper might be 100gsm - 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.

Imagesetter

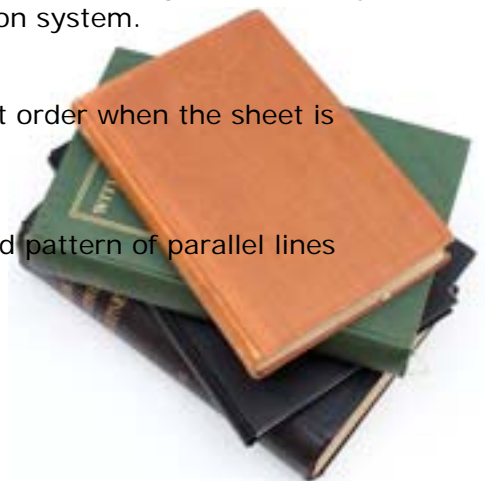
Output device used to produce separated films from digital artwork. It can be thought of as a very high resolution printer. Most systems use the Postscript page description system.

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.

Laid Paper

Uncoated paper often used for business stationery which has a textured pattern of parallel lines similar to hand made paper.





Lamination

A plastic coating which protects the printed surface and usually gives a high gloss or mat finish. Laminated products cannot be recycled.

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 which contains no colours or halftones, such as company symbols or simple diagrams.

Lithography (litho)

By far the most common type of commercial printing and based upon the principle that oil and water do not mix. The printing plate is treated so that the image area attracts oil-based inks and the wet non-image areas repel the oil-based inks. To create a lithograph with a number of different colours, a different plate for each colour must be prepared.

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

A printing process in which the inked image is transferred (ie, "offset") from the plate to an intermediate blanket before being printed on the substrate.

Originals

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

Overs

A quantity of printed material in excess of the amount ordered.

Pantone

The brand name of a colour matching system produced by Pantone, Inc of the USA.

The full spectrum of ink colours are specified and identified by number to produce standard results across the printing industry. Special Pantone books are used to provide exact representations of each specific colour and also demonstrate how the same ink appears when printed on uncoated or coated stock. Sometimes the difference can be quite dramatic.

It is worth remembering that Pantone inks provide a much greater range of colours than can be achieved using CMYK. This is important if trying to match work printed in four colour process with that printed in defined Pantone colours.





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 but this is rarely used.

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.

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.

Printing Plate

The physical plate which carries the image. These can be made from a variety of materials including aluminium and polyester.

Progressives

Colour proofs taken at each stage of printing showing each colour printed singly and then superimposed on the preceding colour.

Proof

A 'test print' produced to show what the finished product will look like in terms of layout, text and colour separations. These can be made in a variety of different ways and at different stages of the production process. The simplest form is a colour laser or inkjet print produced. It should be remembered that any proof, with the exception of a *wet proof*, cannot be relied upon as an accurate method of proofing colour or material.

Increasingly popular are digital proofing systems which make use of colour management techniques for their accuracy.

Register

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

RIP - raster image processor

A computing device which translates a page description into the particular control commands necessary to drive a raster output device. The output device could be a laser printer, an imagesetter, a digital proofer, a CTP setter or perhaps a digital press. Too complicated to get involved in!





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.

Saddle Stitch

A simple way of assembling a small booklet or magazine with a wire stitch through the fold – basically the same as stapling.

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. For many years the industry standard was the drum scanner, a rotary system which produced very high-resolution scans. Flat-bed scanners have risen dramatically in quality to the point where they are also suitable for high-end work.

Score

Heavier paper and boards need to be scored with a rule to make folding easier. Ideally every paper above 150gsm should be scored on folds to prevent the ink from cracking - if no ink is present on the folds then 170gsm can be the limit. If required, we can score and deliver your job flat for ease of storage and leave you to fold manually.

Section

A folded sheet which 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.

Set-Off

A printing fault where ink transfers from a sheet to the one below as it leaves the press creating an undesirable ghost image. This does not happen if the sheet leaves the press dry, such as with our Ryobi 524GX which has an integrated infra-red dryer.

Sheet Fed

A press which prints by taking up one sheet at a time. This is the system of printing used by A Local Printer and is ideal for short to medium run lengths.

Special Colours/ Spot Colours

This refers to custom mixed colours which are produced using specially mixed inks from one of the commercially available colour ranges, such as Pantone.

To print colours outside the range of four 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. It is worth bearing in mind when choosing a colour for a company logo that sooner or later you will want to print a colour brochure using four colour process. A vivid ink which you have chosen from the Pantone book may not have an acceptable CMYK equivalent. Sometimes referred to as PMS colours.

Theoretically it is possible to produce an adequate range of colours using just Cyan, Magenta and Yellow. In Four 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.





Three Colour Printing

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Transparency

The preferred medium for photographs intended for printing. Transparencies generally have sharper images and better colour than photographic prints.

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.

Two colour printing can be an economic way of producing brochures and catalogues if full-colour images are not required. There are creative options such as duotones which can be considered if the subject matter is suitable.

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 Ultra-Violet lamp under which the varnished sheets pass for rapid drying.

Web

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. The opposite of sheet fed.

Wet Proof

The most accurate method of proofing for colour matching and material suitability which involves actually printing a quantity of the specific job using the commercial stock and inks. It requires producing the printing plates, plus the cost of Make Ready, which makes wet proofing a very expensive option particularly if corrections are required.

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.

Wove Paper

Uncoated paper often used for business stationery which has no obvious surface texture or pattern and a smooth finish.

