## **Thomson Reuters** Core Publishing Solutions/Industry-Wide Book Manufacturing Terminology

	1
L	
	1

A hot-melt or cold-set glue used in book binding. Adhesive

Adhesive Binding Generic term for book binding, which uses adhesives along the backbone

> edges of assembled printed sheets. The book or magazine cover is applied directly on top of the tacky adhesive. Examples are perfect-bound

and burst-bound.

Adobe Acrobat A program or suite of programs from Adobe Systems, Inc. which creates,

> edits, and manipulates PDF files that can be viewed on any computer system that has PDF-reading software (such as the Adobe Acrobat Reader). PDF documents are often referred to as Adobe Acrobat files, even if a different program was used to generate the file.

Against the Grain Folding or feeding paper at right angles to the grain of the paper; also

called cross grain.

Anti-Aliasing Smoothing or blending the transition of pixels in an image. Anti-

aliasing the edges on a graphic image makes the edges appear smooth,

not "jagged" or bit-mapped.

Anti-offset Powder Finely powdered starch sprayed on the printed surface of coated paper as

sheets exit the sheet-fed press. This prevents wet ink transfer from the top

of one sheet to the bottom of the next sheet.

**Aqueous Coating** Water-based coating applied like ink by a printing press to protect and

enhance the printed surface.

A place or collection containing records, documents or other materials of Archive

historical interest.

A comprehensive design produced primarily to give the client an approxi-Artwork Mock-up

mate idea of what the printed piece will look like.

Attribute (Font) A font characteristic (such as bold or italic,) created by highlighting a

> font and clicking on a button. Font characteristics created in this way may not print properly (e.g., a bold version of the font might not exist, but it will look bold on your computer screen). Instead, you choose the bold version of the font from the Font menu in the application you are working in.

Automatic Picture Replacement (APR) Scheme where low resolution images are swapped with their high-

resolution counterparts.

Automatic Plate

Changing

Capability of a press to automatically change plates.

Back

The inner margin of page.

Backbone The back of a bound book connecting the two covers; also called a spine. Backing Shaping the spine of a book block to form a shoulder on its front and back;

one of the case binding operations, (see also rounding).

Back Lining Reinforcing material, paper or fabric, that is glued to the book block backbone

orspine in a case-bound book after rounding and backing.

Back Up In printing: to print the second side of a sheet already printed on one side. In

computers: to make a copy of your work on a separate disk in case something

happens to the original.

Banding In digital printing, this term refers to patterns on a print caused by insufficient

color or gray-scale ranges within the output device's image processor, or insufficient information contained within the original scan. Banding is most

noticeable in printed areas that fade from light to dark.

Bar Code A binary coding system using a numerical series and bars of varying thick-

nesses or positions that can be read by optical character recognition (OCR) equipment. Bar codes are used in printing as tracking devices for jobs and

sections of jobs in production.

Basis Weight Weight in pounds of a ream (500 sheets) of paper cut to a given standard

size for that grade; example: 500 sheets of 17-by-22inch 20 lb. bond paper weighs 20 pounds. In countries using ISO paper sizes the

weight, in grams, of one square meter of paper.

Bearers The flat surfaces or rings at the ends of press cylinders that come in contact

with each other during printing and serve as a basis for determining packing

thickness.

Bill of Material (BOM) A list of parts or components by Original Equipment Manufacturer (OEM) part

number, or by other description.

Binders Board Paper board used in making the front and back covers of a case-bound book.

Binding Joining the assembled (collated) pages of a printed piece together. Binding

takes many forms, including saddle-stitching, adhesive binding, mechanical binding and loose-leaf binding. Binding is also used as a general term to

describe all finishing operations.

Bitmap Font A font used to display text on a computer screen. The letters in a bitmap font

are broken up into pixels. When the font is sent to a printer, or enlarged to large point sizes on the screen, the letters will look "jagged" or bit-mapped.

Blanket In 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 which it is

transferred to the paper.

Blanket Cylinder The cylinder that carries the offset rubber blanket.

Bleed When any image or element on a page touches the edge of the page,

extending beyond the trim edge, leaving no margin, it is said to bleed. It

may bleed or extend off one or more sides.

Bleed Tab A bleeding ink square at the edge of a page that functions as a guide for

locating specific material.

Blind Stamp or Emboss A design, that is stamped or embossed without metallic ink or foil. Giving a

bas-relief effect.

Blueline Prepress photographic proof made from stripped negatives where all colors

show as shades of a single color on white paper. Also called brownline, silver-

print, Dylux®.

Body The printed text of a book not including end papers or covers.

Bond Paper A grade of writing or printing paper where strength, durability and perfo-

rmance are essential requirements; used for letterheads, business forms, etc.

The basic size is 17-by-22 inches.

Book Block The gathered signatures of a publication before the cover is added.

Book Paper General term used to define a class or group of papers having common

physical characteristics that, in general, are most suitable for book pro-

duction. The basic size is 25-by-38 inches.

Bottling If a page skews because of the number of pages, the thickness of the paper or

the folding equipment, bottling is a method to adjust/compensate for the

page skewing in folded signatures.

Brightness In paper, the reflectance or brilliance of the paper.

Buckle Folder A bindery machine in which two rollers push the sheet between two metal

plates, stopping it and causing it to buckle at the entrance to the folder. A third roller working with one of the original rollers uses the buckle to fold the

paper.

Building-In A forming and pressing machine that holds cased-in books tightly under heat

and pressure while the adhesive is drying.

Burst Binding A form of binding similar to, but more durable than, perfect binding, where

the spine of each section is slotted or perforated during the folding operation. Glue is pushed up between the perforations during binding and the cover is then drawn on. Its advantages are that it allows the text pages to remain held together as a folded sheet and the adhesive has a larger area to grip by

penetrating the slots and the backs of the signatures.

Burst Bound The book block created for final processing with a hard cover using cold glue

and hot-melt glue to hold the pages/signatures together. The signatures are collated, along with the needed end sheets to bind to the cover, and cold glue is applied to the spine folds. The cold glue is forced into the burst perforation, binding the pages to each other as well as binding the signatures. After the cold glue is dried, hot-melt adhesive is applied to the spine with a paper cap or "crash" in place of a cover. Layout Standard Trim: Spine - 0"; Head -3/16";

Face - 1/8" Min.; Tail - 1/8" Min.

Burst Loose Similar to burst pamphlet process where only the perforations are smoothed

out on the spine before applying a false cover to the signatures. The signatures are collated and bound together using hot melt only to allow for consistent drilling and trimming. After the bound signatures are drilled, 3/16" is trimmed from the spine to create a loose-leaf product. Layout Standard Trim:

Spine – 3/16"; Head – 3/16"; Face – 1/8" Min.; Tail – 1/8" Min.

Burst Pamphlet Similar to perfect bound process, except that the bindery trims only enough

paper from the spine fold to remove the bumps created by the burst perforation on the fold. No spine trim is allotted in Prepress for a burst pamphlet. Burst pamphlets should only be produced when the roll stock used on press only provides enough trim to take the minimum 1/8" face trim. Layout Standard Company 1/2" A 2/16" Face 1/2" A 2/16" A 2/16"

dard Trim: Spine – 0"; Head – 3/16"; Face – 1/8" Min.; Tail – 1/8" Min.

Calender To make the surface of paper smooth by pressing it between rollers during

manufacturing.

Calibrate To adjust the scale on a measurement instrument, such as a densitometer, to

a standard for specific conditions.

Calibration A process by which a scanner, monitor or output device is adjusted to

provide a more accurate display and reproduction of images.

Caliper The thickness of paper, usually expressed in thousandths of an inch (mils). In

board, however, it is expressed as "points". Also a device on a sheet-fed press that detects double sheets or on a binding machine that detects missing sign-

atures or inserts.

Carrier The base solution of an ink used to distribute dye or pigment color.

Water is the carrier for aqueous inkjet ink.

Cartons Corrugated boxes used to pack a finished product.

Case The covers of a Hardback (case bound) book; made with cloth or similar mate-

rial and boards.

Case-Bound A book bound with a stiff, hard cover which is covered by fabric or other mate

rial.

Case Maker A machine that produces hard covers for case-bound books.

Casing-In Insertion of text contents of a book block into the case when binding.

Cast-Coated Paper Paper dried under pressure against a heated, polished cylinder to produce a

high-gloss enamel finish.

Chalking Refers to improper drying of ink. Pigments dust off because ink has been

absorbed too rapidly into the paper.

Chill Rolls On a web offset press, the section located after the drying oven where

heat-set inks are cooled below their setting temperature.

Choke To slightly overlap touching colors in order to compensate for minor mis-

alignments on the printing press. Choke is one process where a lighter

color surrounds and overlaps a darker color.

Chopper Fold Conveying a signature from the first parallel fold in a horizontal plane, spine

forward, until it passes under a reciprocating blade that forces it

down between folding rollers to complete the fold.

CIE LAB The CEILab color space was defined by the Commission Internationale de

l'Eclairage (CIE) in 1976 and represents a three-dimensional, rectangular coordinate system. The vertical coordinate, L, specifies the lightness of a color; the 2 horizontal coordinates a and b represent the hue and the saturation on red/green and blue/yellow axes respectively. The CIELab color space is also ideal for representing color differences, since geometric distances in the color

space more or less approximate the intuitive color differences.

CIP3 International Cooperation for Integration in Prepress, Press and Postpress is a

Manufacturers' Association established in 1995 to promote the non-

proprietary digital integration of the printing process, from Prepress to Postpress. Its most important achievement has been the definition of the Print Production Format, a data format for recording all information relevant for the print process. In 1999, CIP3 was incorporated into CIP4, which deals with a

broader range of subjects.

CIP4 Created in 2000 from the Manufacturers' Association CIP3 (see above),

seeks to provide the basis for the computer-based integration of the entire process involved in the production of print products, from preliminary costing and guotations to delivery and billing. One of the first results has

been the establishment of the Job Definition Format (JDF) as

a common standard.

Coated Paper Paper with a coating of clay or other substances that improves reflectivity

and ink holdout.

Collate A finishing term for gathering paper in a precise order.

Colophon Publisher's imprint or trademark. Generally used on the title page, jacket and

binding.

Color Balance Maintaining the ratio of cyan, magenta and yellow ink to produce a picture

with the desired color and without an unwanted color cast or color bias.

Color Bar A series of colored shapes printed outside of the finished area. These bars are

used to verify the accuracy of the printing job and allows the press operator to

calibrate the print job and adjust the press if necessary.

Color Electronic

Prepress System (CEPS) tronically simulates the traditionally labor intensive or cumbersome

tasks associated with page makeup and color image manipulation.

tasks associated with page makeup and color image manipulation.

A computer-based system for the Graphics Art Industry that elec-

Color Model Also referred to as color space. A color model is a geometric or mathematical

representation of visible colors. Well-known color models include, CMYK, RGB

and HLS (hue, lightness, saturation).

Color Separation The process whereby the four process printing colors (CMYK) are separated

into their primary colors to allow for professional printing.

Colorant Colored particles or dyes added to inks giving them vibrancy and hue value.

Comb, Plastic Binding A curved or rake-shaped plastic strip inserted through slots punched along

the binding edge of the sheet. It is used to hold the product together mechani-

cally.

Compact Disc, Read
Only Memory (CD-ROM)

An adaptation of the CD that is designed to store computer data in the form of

Only Memory (CD-ROM) text and graphics, as well as hi-fi stereo sound.

Compensator A device used on the web press to assist with keeping registration by means of

electronic eyes and a compensator bar on a plate.

Composite Color separation file which contains all color information in one file which can

be printed as a composite or separated into the individual color plates for

printing.

Computer Aided Design (CAD)

The use of computer programs to design detailed two- or three-dimensional

models of physical objects, such as mechanical parts.

Computer Aided The process of using computers to control tools and machinery in Manufactur-

ing (CAM) manufacturing.

Computer to Plate (CTP) The production of printing plates directly from the computer without

requiring film as an intermediate step. Also called "direct-to-plate." The plates are typically made of aluminum, but polyester, polymer and silicon

plates are also used.

Continuous Tone Also known as Contone; an image which contains gradient tones from

black to white.

Contrast The tonal change in color from light to dark.

Copy Original job material (paste-ups, film, photos, and other graphics) furnished

for the print job.

Coverage The amount of ink on a page or sheet, usually given in percentages.

Cover Paper Papers used for the outside covers of catalogues, brochures and booklets.

Crash A flexible paper material used to cover hot-melt adhesive on the spine of a

book block.

Creep Sometimes called "push out," it is the distance margins shift when paper is

folded and/or inserted during finishing. The amount of creep will vary depending on both the number and thickness of the sheets and must be

compensated for during layout and imposition.

CREO A company purchased by Kodak that was one of the original creators of

direct-to-plate devices that Thomson Reuters utilizes.

Crop Marks Crossed lines placed at the corners of an image or a page to indicate where to

trim printed material. Crop marks may be drawn on manually or automatically

applied with some desktop publishing software programs.

Cross Direction In paper, the direction across the grain. Paper is weaker and more sensitive to

humidity in its cross direction.

Crossover Sometimes called "hook-up". Printing across the gutter or from one page

to the facing page of a publication.

Curl In paper, distortion of the unrestrained sheet due to differences in structure

or coatings from one side to the other or to absorption of moisture on an

offset press. The curl side is the concave side of the sheet.

Cutoff Circumference of the impression cylinder of a web press, therefore the

length of the printed sheet on roll to sheet presses or the length of the

repeat pattern on roll to roll presses.

Cyan One of the three subtractive primary colors used in process printing;

commonly known as "process blue."

Cyan, Magenta, Yellow, Black (CMYK) A color model based on four process colors. The colors are mixed to create a

full-color image on a printer.

Cylinder Part of a system of large rollers on an offset lithography press. The plate

cylinder transfers an image onto the blanket cylinder, which is then offset onto a press sheet passing between the blanket and impression cylinders.

Deboss

A plate-sunk image. To press an image into paper so it lies below the surface.

Densitometer An instrument that measures transmitted or reflected light by indicating the

percentage of a given area that is covered by halftone dots. This instrument is

used to ensure consistency between films, proofs and printed pieces.

Density The degree of color or darkness of an image or photograph.

Desktop Color An enhanced EPS file format. Not used as much as it was in the past, Separa-

tion (DCS) the DCS format is still necessary for some types of graphics work. DCS separates a CMYK graphic into five files: one gray scale image for each of the four CMYK process colors and an FPO file with preview which goes into the

page layout document.

Device Driver A program that controls a particular type of device which is attached to a

computer. There are device drivers for printers, displays, CD-ROM readers,

diskette drives to name a few.

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

Die Cutting Using sharp steel rules to cut special shapes from printed sheets. Die cutting

can be done on either flatbed or rotary presses.

Die Stamping Printing from lettering or other designs engraved into copper, brass, or

magnesium.

Digital Press A printing device that produces high-quality output directly from digital files

without the creation of printing plates.

Digital Video Disc (DVD) A type of optical disk similar to the CD-ROM but with much greater storage

capacity. A DVD holds a minimum of 4.7GB of data, enough for a full-length movie. DVD drives are backward-compatible with CD-ROMs, thus enabling

them to play old CD-ROMs, CD-I disks, and video CDs.

Dot An individual element in a halftone reproduction. Using a loupe you will see

that printed pictures are made of many dots.

Dot (Gain) An increase in size of each dot of ink when printed due to temperature, ink and

paper type. A press operator tries to minimize dot gain, which can muddy the

printed image.

DTP An acronym for either "Desktop Publishing System" or "Direct-to-Plate."

Dummy A sample of the proposed work made to establish the exact dimensions of the

bound book, e.g., size, shape, form and general appearance.

Duotone A term for a two-color halftone reproduction from a one-color photograph.

Dust Jacket Printed wrapper around a case-bound book to protect the binding.

EDI Electronic Data Interchange. EDI allows companies to exchange transactional

data electronically.

Electronic Layout

Sheet (ELS)

Used for checking signature page order.

Embossing Relief image to achieve a raised printed surface (blind embossing gives an

unlinked impression on blank paper). To press an image into paper so it

lies above the surface.

Encapsulated

Script (EPS)

Encapsulated PostScript. A file format used to transfer PostScript image Post-information from one program to another. The preferred file format for

saving images, as it is resolution independent, as opposed to TIFF.

End Matter Printed matter (usually explanatory) following the text of a book, e.g. appendi-

ces, bibliography, index etc.

End Papers/Sheets Also called End Sheets; Folded pair of papers attached to the first and last

signatures of a book and pasted to the inside covers. Sheet that attaches the inside pages of a case bound book to its cover. End Papers add to binding strength. Self-end Papers are a type of end paper which uses the text

pages.

Errata Slips Correction slips. Tipped in or inserted as separate sheets, after printing.

Ethernet A very common method of networking computers in a Local Area Network

(LAN). There is more than one type of Ethernet. By 2001, the standard type was "100-BaseT" which can handle up to about 100,000,000 bits-per-second and

can be used with almost any kind of computer.

Even Pages Left-hand pages bearing even numbers.

Fab Cloth-like cover material used to make cases.

Face Edge of signature that is handled when turning pages.

Filler Pads Corrugated cardboard squares to fill space in cartons.

Filter Also called a Plug-In for various programs, e.g., Adobe Photoshop or Illustra-

tor, allowing the program to produce different effects. E.g., sharpening,

blurring, and a multitude of special effects.

Final Size The size of the printed piece after folding and any finished work.

Finished Goods A complete and billable product.

Finishing All post press operations, including folding, trimming, assembling sections

and specialized tasks such as die cutting and foil stamping.

Flat Another name for an imposition, ready for plating.

Flush Cover trimmed to the same size as the text pages, e.g., paperback books.

Fly Leaf Blank leaf at the beginning or end of a book.

Foil Metallic material used for printing (blocking) the wording on the binding case.

Foil Stamp To press a heated die onto a sheet of foil, release the foil from its backing and

adhere it to a substrate.

Fold Bending and creasing a sheet of paper as required forming a printed product.

Folding There are two kinds of folds: parallel and right angle. In parallel folding, each

fold is parallel to the other. An example is a letter that requires a two parallel old for mailing. Right angle folds are folds that are made at right angles to

each other.

Fold Marks Guides on the original copy and printed sheet that indicate where a printed

piece will be creased.

Folio The page number.

Font (Font Family) A font is a complete set of characters in a particular size and style of type. This

includes the letter set, the number set, and all of the special character and diacritical marks you get by pressing the shift, option, or command/control

keys.

Foot Bottom or tail edge of the signature or page in a book.

Fore Edge The outer margin of a page opposite side to spine.

Foreword Prelude to the true text, usually written by someone other than the author.

French Fold Two folds at right angles to each other.

Frontispiece Left hand page illustration facing the title page.

Gang Print two or more finished products on the same sheet during one press run.

Gatefold Flap from the fore edge, with a fold running parallel to the spine of the book.

The finished page is marginally smaller than the normal trimmed page. The two folded pages meet in the centre of the page, edge to edge, rather like a

double gate.

Gathering Lacing the sections of a book in correct order before binding.

Gradient The blending from one color to another color.

Grain Direction In paper making, the direction in which most fibers lie depending on the direc-

tion that the paper travels during the paper making process.

Graphics Interchange One of the two most common image file formats on the Internet today, Format

(GIF) especially for animated banners. A GIF image can consist of a maximum

of 256 colors.

Gripper Edge The leading edge of paper as it passes through a printing press.

Gripper Margin Unprinted blank edge of paper on which grippers bear, usually half an inch or

less.

Grippers The metal fingers on a printing press which holds the paper as it passes

through the press.

Gutter The inside margin between facing pages, or the margin at the binding edge.

Halftone A process in which a black-and-white photograph is re-photographed

through a screen so that the gradations of light and dark in the original photograph are reproduced as a series of tiny dots that print as a continuous tone. The fineness of the screen is measured in lines per inch, as in a "150-line screen," and is a factor in determining the quality of a printed photo.

Hardcover A book with a separate case bound cover.

Head The top of the page of a book or the top of a signature.

Head (Margin) Margin from the of the type area to the top of the page.

Headbands Strips of material (often decorative) placed at the head and sometimes also at

the foot of the spine of a case bound book block.

Head-to-Head Arranging pages on a form during planning so that the top of one page

Imposition butts up against the top of the opposite page.

Heat-to-Tail Imposition Arranging pages on a form during planning so that the top of one page

butts against the bottom of the opposite page.

Hickey Reoccurring, unplanned spots that appear in the printed image from dust, lint,

or dried ink.

Hot Melt Type of adhesive used on unsown binding.

Image A digitized representation of a photograph with the ability to be displayed on

a computer monitor and output to paper or plate.

Image Area Portion of paper on which ink can appear.

Imposition Print operators will print books using large sheets of paper which will be

folded later. This allows for faster printing, simplified binding and lower pro-

duction costs. Imposition is the process of arranging pages correctly

prior to printing so that they fold in the correct order.

Impression Putting an image on paper.

InDesign The latest, state-of-the-art software from Adobe for publication design and

layout.

Index Alphabetical listing of topics or subjects in a book showing the page numbers

on which they appear.

Indicia Postal information place on a printed product.

Ink Fountain The reservoir on a printing press that holds the ink.

Inkjet Printer Printer used on mailing and boxing lines to print subscribers' names or

product information on labels.

Insert Specially printed piece for insertion in a publication.

InSite Kodak's internet / intranet File Delivery and proof approval system.

Interleaf Leaves inserted between the pages of a book.

ISBN International Standard Book Numbering System

ISO International Standards Organization

Job Definition A non-proprietary information carrier that can link and refer to multi-

Format File (JDF) ple production devices; based on XML. This allows creators

and print service providers to describe the intent of a printed piece, as well as each of the process steps that are required to achieve the

intent. Also considered an electronic job ticket.

Joint Groove going along the spine on case binding.

Joint Photographic An image compression format used to transfer color photographs and Experts Group (JPEG) images over computer networks. Along with GIF, it is the most common way

images over computer networks. Along with GIF, it is the most common way

photos are moved over the Web.

Kerning In typesetting, the process of subtracting space between specific pairs of

characters so that the overall letter spacing appears to be even.

Kiss Die Cut Cutting the top layer of a pressure-sensitive sheet and not the backing.

Knock Out To clear an area of absolutely every printing dot, or to outline an image and

drop out all dots surrounding it. E.g., when white type appears on a color field

(hence "knocking out" of the color).

L

LAB (Color Model) A color model that describes color in terms of its luminosity or brightness (L).

It then describes color on an axis from green to magenta (A) and then from blue to yellow (B). LAB contains every color in both the RGB and CMYK

gamut.

Laminate Bonding clear plastic film by heat and pressure to a sheet of paper to protect

the print and improve its appearance.

Landscape Page or illustration wider than it is deep.

Layout 1/8-inch Used for the perfect bound binding method. Layout Standard Trim:

Spine Trim- 1/8"; Head - 3/16"; Face - 1/8" Min.; Tail - 1/8" Min.

Layout 3/16-inch Used for the Burst Loose binding method. Layout Standard Trim:

Spine Trim 3/16"; Head – 3/16"; Face – 1/8" Min.; Tail – 1/8" Min.

Layout No Spine Trim Used for the following binding methods: Burst Pamphlet, Saddle Stitched,

Side Stitched, Burst Bound, Side Sewn, and Smythe Sewn. Layout Standard

Trim: Spine – 0"; Head – 3/16"; Face – 1/8" Min.; Tail – 1/8" Min.

Leading The space between lines of type, often measured from the baseline of one line

to the baseline of the next.

Leaf Two pages of a book. The front and back of a single piece of paper.

Line Gauge A printer's ruler, usually marked off in points, picas, agates, and inches, and

sometimes also in centimeters. A 12"-inch, two-sided gauge has inches in 16ths and agate lines on the front. The back has 6 and 12 point (Picas) and

point scales.

Line Screen Refers to the organization of elements of a printing screen; used to define the

density of the screen, e.g., a 133-line screen refers to a pattern with halftone dots per inch. The higher the number, the higher the quality of detail repro-

duction.

Lining Material Stock used in the center between boards when making cases. Also used

at the case in line to attach headbands.

Lip The extended edge of one side of a signature that is gripped to open the

signature to the centre spread to facilitate the opening of the section.

Also known as lap or pick-up.

Loose-leaf Finished product that is provided as loose sheets, often drilled for inser-

tion into binders.

Loose-Leaf Binding A process in which individual sheets can be inserted and removed at will

from a section of a larger document often held in a three-ring binder.

LZW Compression A type of compression that can be used automatically when saving TIFF

files. Using LZW compression will not result in a loss in quality, but the compression rate decreases as the amount of information (number of

bits) increases.

Magnus A high-speed plating device used developed by Thomson Reuters and devel-

oped by Kodak.

Make-Ready Machine preparation for each operation in the production process. A

significant percentage of the cost of production, particularly for short runs.

Space surrounding printed area of a page. Margins

A set of horizontal and vertical lines which indicate where a page should be Mark

positioned or trimmed. It could also be a mark on a plate that specifies a fold,

a bleed, etc.

Match print Trade name for 3M integral color proof.

Mechanical Binding A generic term to describe book binding by mechanical means, such as ring,

post, comb, spiral, wire and wiro, and by holding pages and cover together by

staples such as saddle-wired (stitched) and side-wired (stitched).

Micrometer Instrument used to measure the thickness of different papers.

Midtone The middle range of tones in an image.

Moiré The noticeable, unwanted pattern generated by scanning or rescreening a

piece of art that already contains a dot pattern. This effect can also be caused

by the misalignment of screen angles in color work.

**OEM** Original Equipment Manufacturer

Offset Printing Offset printing is a technique where the inked image is transferred

(or "offset") from a plate to a rubber blanket, then to the printing surface.

OK Book A set of signatures gathered from the Press to use as a sample in the Bindery.

Opacity Property which minimizes "show through" of printing from the reverse side

of a sheet of paper. The more opacity or the thicker the paper, the less

show-through.

**Open Prepress** 

Also known as image-swapping technology, this is the process that allows Interface (OPI) low-resolution images inserted into a page layout program to be swapped

with the high-resolution version for plate setting.

OS A commonly used acronym referring to an operating system.

OS 10 / X The latest version of the Mac OS, the operating system software for Macintosh

computers.

**Outline Font** This is the correct name for what many people call a printer font. An outline

> font is the part of a PostScript Type 1 font that is installed on the computer hard disk and that gets downloaded to the output device when printing. It contains the PostScript instructions necessary to correctly describe the font

shape.

Overhang Cover Cover larger in size than the pages it encloses.

To print one ink directly on top of another ink. Overprint

Overs Copies produced in excess of the quantity ordered.

Page Count Total number of pages in a book, including blanks.

PageMaker A page layout program produced by Adobe Systems for both Windows and

Macintosh users.

Pallet A portable platform used to enable drivers to move finished goods from one

area to another. Also used to store product in the warehouse.

Pantone Matching An ink color system containing about 500 color swatches, each of which is

System (PMS) identified by a color number and a formula for the ink.

Perfect Binding An adhesive-binding method. Signatures are collated on top of each other, the

spine of the book block is sawed off to create loose-leaf pages and roughened before adhesive is applied and the cover is drawn on. Note that 3mm of the

back of the book is trimmed off during binding.

Perfecting Printing both sides of the paper (or other material) on the same pass through

the printing press.

Perfecting Press A sheet-fed printing press that prints both sides of a sheet in one pass.

Pica A typographic measurement. There are 12 points to a pica and approximately

6 picas to an inch.

Pico liter The unit of measure for the volume of ink contained in a drop of ink.

A pico liter = one trillionth of a liter.

Pigment Water-based ink which contains solid, opaque pigment particles suspended in

ink to provide color. Both the HP360 and Canon i300 ink uses pigment.

Pinholes Tiny areas that are not covered by foil in stamping.

Pixel Pixel is an abbreviation for picture element. It is the smallest individual dot

that can be displayed on a computer screen.

Plate Short for printing plate, this is generally a thin sheet of metal that carries

the printing image. The plate surface is treated or configured so that only

the printing image is ink-receptive.

Plug-In A self-contained software component that adds or changes functions in

a particular software system. When a user adds a plug-in to a software system, the foundation of the original software system remains intact.

Pocket Slit in the cover board in the back of a hard bound book to store pocket part.

Pocket Part A side-stitched supplement for a legal bound volume. This is usually pub-

lished yearly.

Point A printer's measure for type specifications. There are 12 points in a pica and 72

points in an inch.

Portable Document A file format developed Adobe Systems. PDF captures formatting information

from a variety of desktop publishing applications, making it possible to send formatted documents and have them appear on the recipient's monitor or printer as they were intended. To view a file in PDF format, you need Adobe

Acrobat Reader, a free application distributed by Adobe Systems.

Portrait A type of page orientation or illustration deeper than it is wide.

Postscript (PS) A page description language developed by Adobe Systems, Inc. to describe an

image for printing. It handles both text and graphics. A PostScript file is a purely text-based description of a page. The computer language

most recognized by printing devices.

PostScript Printer A file that contains information on screen angle, resolution, page size Descrip-

tion (PPD) and device-specific information for a file to be printed on a

PostScript device.

Preflight The test used to evaluate or analyze every component needed to produce a

printing job. Preflight confirms the type of disk being submitted, the color gamut, color breaks, any art required (illustrations, transparencies, reflective photos, etc.), layout files, screen fonts, printer fonts, EPS or TIFF files,

laser proofs, page sizes, print driver, crop marks, etc.

Preps An imposition software that electronically places all of the client pages

properly for plating. They are then sent to Prinergy (see below) for

refining and trapping prior to plating.

Prinergy A software/hardware system used by Thomson Reuters developed by Kodak.

The system processes client electronic files by "refining" and trapping the

electronic information prior to plating for the printing press.

Printer Driver A program that controls printing and sets options such as print quality and

paper size for a particular printer.

Printers Spreads Pages of a document that are arranged in the order that they will be printed

on a press. Thomson Reuters preference: Readers Spreads (see below).

Process Color Also called full color. Refers to the four-color process reproduction of the full

range of colors by the use of four separate printing plates, one for each of the primary colors - magenta (process red), yellow, cyan (process blue), and black.

Production Order A precise description of a print order which contains all specifications

and comments required for a job.

Profile A file which describes how colors look on a specific output device. These

profiles are used by Color Management Systems to automatically adjust colors as it passes from one device to another, making sure that the im-

age looks the same on all devices.

Proof The first copy of the actual book, used to find errors and make necessary

corrections.

Quadtone A gray scale image reproduced using four spot or process colors to add

depth and color.

QuarkXpress A desktop publishing (page layout) application for Mac OS and Windows,

produced by Quark, Inc.

Raster Graphics A type of graphics file which stores the images as a collection of pixels.

They are also called bit-mapped images.

Raster Image A component used in a printing system which produces a bit map. The Proces

sor (RIP) bit map is then sent to a printing device for output. The input may be a page description in a high-level page-description language such as Post

Script, Portable Document Format or another bit map of higher or

lower resolution than the output device.

Readers Spreads Pages in a document arranged in the same order that they would be if a

reader were reading the finished product. Publications are not printed this way on the press. Software rearranges or imposes the pages on a layout for plating that allows for folding and cutting into the final product.

Ream Five hundred sheet of paper.

Recto The right-hand page of a book.

Red, Green Blue (RGB) The color space commonly used for computer monitors that divides color into

the three primary colors of light: red, green and blue. They are not used in the

printing process.

Register To position print in the proper position in relation to the edge of the sheet and

to other printing on the same sheet.

Register Marks Cross-hair lines or some other marks on film, plates, and paper that guide

production personnel in processing a print order from start to finish.

Resolution Generally used as an expression of image output quality; usually expressed as

either dots per inch (DPI), which refers to the number of pixels per inch, or lines per inch (LPI), which is the number of rows of dots per inch in a printed halftone image. The number of pixels in an image. The more pixels, the higher the resolution. The higher the resolution, the better the picture.

duces a much darker, deeper black on press than can be achieved by using the

black ink unit alone.

Right-Angle Fold A term used for two or more folds that are 90-degree angles to each other.

Rounding Creating a round spine of a book block during the hardcover binding process.

Run Number of copies to be produced. This is also called print run.

Running Head Title repeated at the top of each page of a book.

Saddle Collation Pages are ordered consecutively for the first half of the signature; the Format second half of the signature contains the last pages of the job in consecutive order. The next signature in the layout will contain the pages that follow the first half of the previous signature and which precede the second half of the previous signature. (E.g., In two 32-page signatures, signature 1 would contain pages 1-16 and 49-64. Signature 2 would contain pages 17-48). Saddle Glued A binding method where a line of glue is applied along the spine folds to hold leaves and the cover together. Saddle Stitched Pamphlet produced by opening the signature at the middle fold and Pamphlet placing it over the spine fold of the next signature. After all signatures are collated in this fashion, wire is "stitched" or stapled through the spine fold to hold the product together (usually two stitch positions). The product may be produced with a cover or may be a selfcover pamphlet. Layout Standard Trim: Spine – 0"; Head – 3/16"; Face – 1/8" Min.; Tail - 1/8" Min. Scanner A digitizing device used to translate a picture or typed text into a pattern of dots which can be understood and stored by a computer. A crease put on paper to help it fold better, particularly helpful with heavier Scoring paper stocks, so that it will fold without cracking. Screen A piece of fine mesh, usually made of wire, that is used to create color tint in printing. Piece of film with dots of uniform density, used to make plates that will print screen tints. Screen Ruling The number of lines or dots per inch used in both directions on a contact screen to make halftones or separations. Screen rulings are available from 65 lines per inch to 200 lines per inch. For color separations, however, it is better to use 150 line screens for best press control and visual resolution. Self Cover Cover printed on the same stock as a book. A type of end paper. If the extent of the book is such that blanks are left at Self-Ends front and back, the blanks can be used as end papers and are known as self-ends. Server A host computer that holds and delivers information and software to other computers linked by a network. Sewn Binding A book binding method using threads to hold signatures together, e.g., thread-sewn, section-sewn with either cover drawn on or case bound. **Sheet-Fed Press** Press that uses pre-cut sheets of paper, rather than rolls. Sheets Plain or printed paper in the large flat form before folding. Sheetwise To print one side of the paper, then turn the sheet over to print the other side of the paper, using the same gripper and opposite side guide.

A technique used to compensate for creep. The gutter margin on a page is gradually narrowed from the outside pages to the middle pages of the

Shingling

signature.

Short-Grain Paper Direction of paper in which the machine is parallel to its shortest dimension.

Side Guide The mechanical register unit on a printing press that positions a sheet from

the side.

Side-Sewn After initial burst binding, the book block has heavy-gauge thread "sewn"

through the side of the entire book block near the spine. This method is used only for Elementary/High School textbooks and is similar to burst bound except no hot melt or crash is used. Layout Standard Trim: Spine -0"; Head -3/16"; Face -1/8" Min.; Tail -1/8" Min.

Side-Stitched Type of stitching produced by collating the signatures and "stitching" or

stapling wire through the side of the collated signatures in 2 stitch positions. This is also known as a Pocket Part. Layout Standard Trim: Spine – 0"; Head

- 3/16"; Face - 1/8" Min.; Tail - 1/8" Min.

Signature A printed flat sheet that is to be later folded into a multi-page document.

Signature Mark Used in book work as a guide to gathering. The signature mark is usually

a small capital letter but may also be a figure or bar printed at the bottom of the first page of each section (signature) of the book. The sequence of

signatures is progressive throughout the book.

Slitting Cutting printed sheets into two or more sections by means of cutting

wheels on the folding machine

Small Computer A high-speed interface for hard drives, CD-ROM drives, scanners and System

Interface (SCSI) other devices.

Smythe Sewn Signatures are collated in order with end sheets. After collating, the

signatures are fed into a sewing machine that sews thread through the spine fold of one signature at a time in consecutive order. After sewing, the back block must be "pipped" to tighten the spine by squarzing the

book block must be "nipped" to tighten the spine by squeezing the book together and applying a thin layer of cold glue to the spine to keep the

spine tight. Layout Standard Trim: Spine -0"; Head -3/16"; Face -1/8" Min.;

Tail – 1/8" Min.

Specifications for

Web Offset Publications (SWOP) A standard set of specifications for color separations, proofs, and printing

to encourage uniform standards in the industry.

Spine Part of a book's cover or jacket, visible when the book is on a shelf, or

the binding edge of a book or publication.

Spine Perforation Cuts on the spine of a signature. Styles vary depending on binding

requirements. Examples are Burst, Mini Burst, Saddle, and Sewn.

Spiral Binding Binding with wires in spiral form inserted through holes punched

along the binding side.

Spoilage Planned paper waste for all printing operations.

Spot Color A specific color in a design, usually designated to be printed with a specific

matching ink, rather than through process CMYK printing.

Spot Varnish Varnish used to highlight a specific part of the printed sheet.

Spread When a publication is printed with several interacting spot colors, gaps or

color shifts may appear between objects. A spread closes the gap by

overlapping a light foreground object to a dark background.

Squares Projection of the boards beyond the head, fore edge, and tail of a book

Stamping Using a die and often colored foil or gold leaf to press a design into a book

cover, a sheet of paper or other substrate. The die may be used alone (in blank stamping) if no color or other ornamentation is necessary. Special presses fit-

ted with heating devices can stamp designs into book covers.

Standard Collation Pages run in consecutive order within the signature for collating one Format

signature on top of the next. (If 2 32-page signatures, Signature 1 would con-

tain pages 1-32, Signature 2 would contain pages 33-64.)

Stay Drill Cloth reinforcement used when making six-page or pocket end sheets.

Step and Repeat Pre-press technique of exposing an image in a precise, multiple pattern to cre-

ate a flat or plate. Images are said to be stepped across the film or plate.

Stock Paper or other material to be printed and bound.

Stuffit A Stuffit file is a common means of compressing and distributing data on the

Macintosh platform. Through the use of a program created by Aladdin Systems, one can make a given file or folder much smaller for backup or distribution. The Windows counterpart of the Stuffit process would be to create and

distribute "zip" files.

Substrate Any surface on which printing or stamping is done.

Super A gauze-like material added to the book block when casing in the add

strength to the hard bound book

Table of Contents A list of chapter titles, main headings or other divisions of a book inserted in

the preliminary pages before the main text.

Tagged Image File An industry-standard file format developed for the purpose of storing Format

(TIFF) high-resolution, bit-mapped, gray-scale, and color images.

Tail Foot or bottom of a signature.

Tail Margin Margin from the bottom of the type area to the bottom of the page.

Tear-Out Perf A perforation made in the folder of a web press to allow the end user to

easily tear out a page of the book.

Text Body matter of a page or book, as distinguished from headings.

Thermoplastic Binding A form of binding in which the pages are attached to a cover by means

of a heat set plastic adhesive.

Throw-Out Folded map or plan printed and bound in a book to fold out to a size larger

than the page size.

Thumb Index or Alphabetical or subject index cut into the fore-edge of a book (Thumb Cut) to

facilitate quick reference. Dictionaries are sometimes thumb cut.

TIFF Downloader A Kodak product that sends final output TIFFs to CREO plate setters for

plating.

Tipped-In An illustration or printed matter separate from the main work and

pasted in correct position at its inner edge to the page following/preceding it.

Title Page The right-hand page at the front of a book following the half-title page. The

title page shows the title of the book, the author's name, the publisher's

name and the year of publication.

Tracking The process of uniformly increasing or decreasing the space between all

glyphs (letters) in a block of text. Tracking is sometimes called character

spacing or letter spacing.

Transparency A selected color or area on an element in a page design that allows another

page element behind it to become visible.

Trapping A technique in which abutting colors are slightly overlapped to minimize the

effects of mis-registration of the printing plates.

Trim The cutting of the finished product to the correct size. Marks are incorporated

on the printed sheet to show where the trimming is to be made.

Trim Marks Crop marks placed on copy to indicate the edge of the page for trimming.

Trim Size The final size of one printed image after the last trim is made.

TrueType An outline font standard originally developed by Apple Computer in the late

1980s as a competitor to Adobe's Type 1 Font used in PostScript.

Typeface The design name of the characters within a type family or font, for example,

Times New Roman.

Unders Numbers of copies short of the quantity ordered.

Up In printing, two-up, three-up, etc. This refers to the impositions of material to

be printed on a larger size sheet, to take advantage of full press and

binder capacity.

Varnish A clear liquid applied to printed surfaces for looks and protection.

Vector Graphic A graphics format that uses shapes and lines, called paths. Vector graphics are

resolution-independent graphics that appear smooth and crisp regardless of how magnified the image is on screen. They also can be enlarged as big as you want them without having jagged edges. This format is best for line art and

logos that don't require complicated coloring or textures.

Veranda Projection of the boards beyond the head, fore edge and tail of a book, known

as squares.

Verso The left-hand page of a book.

Vignette A photo or illustration, etc., in which the tones fade gradually away until they

blend with the surface they are printed on or into another color.

Vignette Halftone A halftone whose background gradually fades to white.

Virtual Proof Looking at a visual representation of a project on a computer screen versus

looking at a physical hard-copy proof. Typically delivered to a client as a

PDF file.

Wash-up Removing printing ink from a press and washing the rollers and blanket.

Certain ink colors require multiple wash-ups to avoid ink and chemical

contamination.

Waste A term for planned spoilage.

Web Roll of paper used in a web press and most often folded, pasted and convert-

ed in one continuous form. Also a ribbon of paper as it unwinds from a

roll and threads through the press.

Web Guide A device on a web press that by use of electronic eyes, keeps the paper

web straight as it runs through the different sections of the press.

Web Press A high-run, fast-speed printing press that uses rolls of paper rather than

individual sheets.

Wire-O Binding Continuous double series of wire loops run through punched slots along

the binding side of a booklet.

With the Grain Folding paper parallel to the grain of the paper.

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 guide 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 for

printing both sides.

Write Once, Read It is sometimes used when discussing computer storage media that can Many

(WORM) be written to once, but read from multiple times. Examples of such

storage media are CD-R and DVD-R.

Xtension A plug-in for the page layout program QuarkXPress.

ZIP The filename extension used by files compressed into the ZIP format

common on PCs.

Zoom Enlarges the view of an object enabling you to see more details.