

3D Printing (Rapid Prototyping) - Is a manufacturing method whereby 3D objects are quickly made on a reasonably-sized machine connected to a computer containing blueprints for the object. The basic principles are like that of a 2D printer - materials cartridges, flexibility of output, translation of code into a visible pattern.

A4 - ISO paper size 210mm x 297mm used for letterhead.

AI - Adobe Illustrator's metafile format, which is actually a type of Encapsulated Postscript.

AM (Amplitude Modulation) Screening - Traditional halftone screening, as opposed to FM (Frequency Modulated) screening, has dots of variable size with equal spacing between dot centers. Hybrid screen combines AM and FM screening. See halftone.

AM/FM Screening - This is an issue to discuss with your printer as to which screen option is more appropriate for your job. The advantage of FM screening is that moiré patterns are no longer an issue.

Ablation - Method of imaging digital proofs or CTP plates by vaporizing small amounts of material, typically with a thermal laser. Also refers to the process of writing data to optical memory with a laser that burns holes into thin metal film.

Abort - A computing command that instructs the system to abandon a program or ignore all data transferred after a given point.

Access - (1) A noun indicating the ability to log on to the Internet or another network. (2) A verb meaning to retrieve data from a hard drive or other physical storage medium or another computer connected via network or modem.

Access Control - In a network, a means of ensuring the system's security by requiring users to supply their names and passwords each time they log on.

Access Control List - In a network, a database that holds the names of the valid system users and notes the level of access that each has been granted.

Access Time - The interval between the instant at which a call for data is initiated and delivery of the data is completed.

Achromatic - Having no color or hue.

Actinic Light - Light that exposes a coating or emulsion.

Additive Color Theory - The mixture of red, green and blue light, the primary colors of light, to produce white light.

Adhesive Binding - Applying a glue or another, usually hot-melt, substance along the backbone edges of assembled, printed sheets; the book or magazine cover is applied directly on top of the tacky adhesive.

Address - (1) A character or group of characters that identifies a particular part of computer storage or some other data source or destination. (2) In data communication, the unique code assigned to each device or workstation connected to a network.

Addressability - In a line of printed digital information the number of positions per unit length, usually per inch, at which successive pixels are placed.

Against the Grain - At right angles to the direction of the grain of the paper.

Airbrush - A function of a color imaging system to add or remove printing ink of any value in a designated picture area.

Alias - An alternate or duplicate label for a data element in a computer system. For example, one email address may have several aliases representing different departments or individuals. On a Macintosh, an alias icon makes a program, such as Microsoft Word or QuarkXPress, accessible from different areas on the desktop instead of just where the actual program is stored.

Aliasing - A "staircase" or jagged effect that occurs when display resolution is too coarse to minimize the broken or crooked appearance of certain electronic design elements. Aliasing is more visually pronounced in diagonal lines, curves and circles.

Alpha Channel - An eight-bit channel reserved by some image processing applications for masking or retaining additional color information.

Alteration - Any change made by the customer after copy or artwork has been given to the service bureau, separator or printer. The change could be in copy, specifications, or both. Also called AA, author alteration or customer alteration.

Amberlith - The orange or red acetate material that artists cut into elements or shapes to put on areas of keylines indicating where halftones, tints, etc., are to be positioned. Also called rubylith.

Analog - Of a circuit or device having an output that is proportional to the input. Not binary.

Analog Device - A computer or other device that uses continuous signals of varying intensity rather than digital signals that can only be "on" or "off." Some color scanners use hardwired electronic circuits to perform analog color correction and tone reproduction, while other scanners use digital data to perform similar functions.

Analog Workflow - Traditional workflow that relies heavily on film and photosensitive materials and processes.

Anilox - This inking system is commonly used in flexographic presses. An elastomer-covered fountain roller runs in the ink pan and is adjustable against a contacting, engraved metering roll. Ink is flooded into the engraved cells of the metering roll, excess is doctored off by the wiping or squeezing action of the fountain roll or a doctor blade, and that which remains beneath the surface of the metering roll is transferred to the printing plates.

Anti-offset Powder - Finely powdered starch sprayed on the printed surface of coated paper as sheets leave the press to prevent wet ink from transferring from the top of one sheet to the bottom of the next sheet.

Antique Finish - A term describing the textured surface, usually on book and cover papers, which have a naturally rough finish.

Antivirus Program - The essential software that is used to detect and destroy rogue applications designed to damage a computer.

Application Files - The files that contain the data created by software programs; also called data files.

Application Program - The computer software designed to perform actual jobs as opposed to the system programs that manage equipment operation.

Applications Program Interface (API) - System software that allows computer programmers to create interface features or, in a network, determine how the various features will be used.

Aqueous Coating - Water based coating applied like ink by a printing press to protect and enhance the printed surface.

Archival - (1) A document that can be expected to be kept permanently as closely as possible to its original form. An archival document medium is one that can be "expected" to retain permanently its original characteristics (such expectations may or may not prove to be realized in actual practice). A document published in such a medium can be expected to resist deterioration. Permanent paper is manufactured to resist chemical action so as to retard the effects of aging as determined by precise technical specifications. (2) Data preserved in its original state for a long period of time. The definition of length is flexible - anywhere from five to more than 100 years - depending on the storage medium.

Archival Image - An image meant to have lasting utility. An "archival" digital image is generally an image kept stored.

Archival Standards - The standards to be met by a type of recording material or process in order for this material to have and retain specified characteristics necessary for permanent records.

Archival Storage - The long-term storage of image information on photographic, magnetic, or other media.

Archive - (1) A group of compressed computer files. (2) A repository specifically designed for preservation, storage, display and use of archival records. (3) A collection of permanently valuable historical records documenting a particular subject or activity or transaction. Also the repository where such a collection is kept. (4) A repository that intends to preserve information for access and use by one or more Designated Communities.

Artifact - A visible defect in an electronic image, caused by limitations in the reproduction process (hardware or software). Aliasing patterns are an example of artifacts.

Artwork – comprehensive - Design produced primarily to give the client an approximate idea of what the printed piece will look like. Alternative terms: comprehensive; comp.

Ascender - The part of a lower case letter which rises above the main body, as in "b" or "d".

ASCII (American Standard Code for Information Interchange) - The international standard codes that are used by most computers to symbolize letters, numbers, punctuation and certain special commands.

Assembling - Collecting individual sheets or signatures into a complete set with pages in proper sequence and alignment. Assembling is followed by binding.

Asset Management - Wrapper formats must support indirect references to content < that is, references to objects which are themselves references to Content. This is a basic requirement used to support all manner of different material management systems. Effective asset management is required by the users. This may be provided by either manual or automatic methods as appropriate. Wrapper referencing of Content can work most effectively where automation tools are provided for storage administration tasks and to ensure cohesive referencing when files are moved or copied.

Assets - Things that a user sees or hears, e.g., bit map, audio ,text.

Audit Trail - An established method for tracing the changes made to pictorial or text data during each stage of processing.

Augmented Reality (AR) - AR technologies join the real and virtual worlds, providing a computer-modified view of reality to enhance clarity or interest. AR can place a virtual image in a live experience, by pointing a computer or smart phone web camera at a code-embedded, high-contrast image such as one printed on a page which triggers a virtual holographic-type image that comes to life right before the viewer's eyes. Increasingly used in marketing with its ability to add interactivity and show products from different views and in a variety of settings. ARs can include sound, video, graphics, and GPS data.

Author's Alterations (AA) - Author's alterations are changes made to a job after it has already been sent to a printer for production. If you (the customer) make changes to your original file, these are AAs and the printer can charge you for making them. If, however, the errors are attributable to the printer, these are PEs (printer's errors) and you don't pay for correcting them. See PE's.

Author's Proof - Prepublication copy sent to the author for approval. It is returned marked "OK" or "OK with changes."

Automatic Indexing - Indexing of a text done by computer without human intervention (usually by finding the words occurring most frequently within the document).

Automatic Picture Replacement (APR) - Scitex's implementation of the process in which a low resolution image is automatically replaced by the high resolution version of the image.

Automatic Plate Changing - Presses equipped with automatic plate changing capability.

Autotrace - A feature found in some graphics programs that allows conversion of bitmapped images into an object oriented format. See also: bitmap.

Background Processing - Procedure by which a computer can execute one function, such as printing, while the user simultaneously executes another function, such as word processing or image editing.

Back Up - (1) In printing; to print the second side of a sheet already printed on one side. (2) In computers; to make a copy of your work on a separate disk in case something happens to the original.

Banding - An electronic prepress term referring to visible steps in shades of a gradient.

Bandwidth - The transmission capacity of an electronic pathway such as a communications line, computer bus or computer channel. Digital bandwidth is the number of pulses per second measured in bits per second (bps).

Bandwidth on Demand - A concept in which a user can obtain more bandwidth as the application warrants. It enables users to pay for only the bandwidth they use, when they need it.

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

Baseband - A frequency band that uses the complete bandwidth of a signal.

Baseband Transmission - Transfer of a digital or analog signal in its original form without modulation.

Basic Input/Output System (BIOS) - The code that controls basic hardware interactions, such as the keyboard and hard drive, on a computer system.

Basic Size - 25" x 38" for book papers, 20" x 26" for cover papers, 22 fi" x 28 fi" or 22 fi" x 35" for bristols, 25 fi" x 30 fi" for index.

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" x 22" 20 lb. bond paper weighs 20 pounds. In countries using ISO paper sizes the weight, in grams, of one square meter of paper.

Baud - A speed of data transmission, pronounced "bod". Today, modems measured in baud are relics.

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.

Beveled Emboss - The sides of an embossing or debossing die are typically given beveled edges to allow printers to press harder into the paper and get a deeper impression without breaking the paper fiber.

Bezier Curve - The description of a character, symbol, or graphic by its digital outline used by drawing programs to define shapes.

Bi-cubic Downsampling - Bi-cubic downsampling uses a weighted average value to assign to the pixel area for image compression.

Binary - A number representation consisting of zeros and ones used by practically all computers because of its ease of implementation using digital electronics. Any file format for digital data encoded as a sequence of bits but not consisting of a sequence of printable characters.

Binder's Creep - The slight but cumulative extension of the edges of each inserted spread or signature beyond the edges of the one that encloses it in a saddle-stitch bind.

Binding - The fastening of the assembled sheets or signatures along one edge of a publication.

Bit - The smallest unit of binary information. It has one of two possible values—zero or one—used to indicate "on" or "off" or "yes" or "no" in the storage and transfer of electronic information and images. A contraction of the term "binary digit."

Bitmap - An image represented by an array of picture elements, each of which is encoded as a single binary digit.

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

Blanket Cylinder - The cylinder that carries the offset rubber blanket, placing it in contact with the inked image on the plate cylinder and then transferring the inked image to the paper carried by the impression cylinder.

Bleed - Printed image which extends beyond the trim edge of the sheet or page.

Bleed Tab - A bleeding ink square at the edge of a page that functions as a guide for locating specific material.

Blind Image - Image that is debossed, embossed or stamped, but not printed with ink or foil.

Blocking - Sticking together of printed sheets causing damage when the surfaces are separated.

Blueline - Prepress photographic proof made from stripped negatives where all colors show as shades of a single color on white paper. Also called brownline, silverprint, Dylux®.

Body - (1) The printed text of a book not including endpapers or covers. (2) The size of type from the top of the ascenders to the bottom of the descenders. (3) In inkmaking, a term referring to the viscosity, or the fluid consistency, of an ink (e.g., an ink with too much body is described as stiff).

Body Type - Text set in paragraph or block form, as distinguished from heads and display type matter. Alternative term: body matter.

Boilerplate - Standard text that is stored electronically and can be rearranged and combined with fresh information to produce new documents.

Bond Paper - A grade of writing or printing paper where strength, durability and performance are essential requirements; used for letterheads, business forms, etc. The basic size is 17" x 22".

Book Paper - A general term for coated and uncoated paper. The basic size is 25" x 38".

Boolean Logic - Its rules govern logical functions (true/false) and are the foundation of all electronic circuits in the computer. AND, OR and NOT are the primary operations of Boolean logic - serves as the basis of machine intelligence and, hence, computer searches.

Boot - To start up a computer. During the boot-up sequence, the computer carries out hardware diagnostic tests, determines what peripherals are connected, and loads the operating system.

Bottling - The process of skewing pages to compensate for paper thickness as it is folded. Primarily used on signatures designed for large web or large sheetfed presses.

Breakacross - A photo or other image that extends across the gutter onto both pages of the spread. Alternative terms: crossover; reader's spread.

Break for Color - In artwork and composition, to separate the parts to be printed in different colors.

Brick-and-mortar - Located or serving consumers in a physical facility as distinct from providing remote, especially online, services.

Bridge - The unit that interconnects two or more local-area networks that use the same logical link control protocol but may use different medium access control protocols. The term can also refer to the equipment used in a connection of local loops, channels, or rings to match circuits and facilitate data transmission.

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

Bristol - Type of board paper used for post cards, business cards and other heavy-use products.

Broadband - A frequency band that can be divided into several narrower ones to support simultaneous transfer of voice, video, and data. See also: baseband.

Broadband Transmission - Using analog signals, carrier frequencies, and multiplexing techniques to permit more than one node on a network to broadcast at a time

Bronzing - Printing with a sizing ink and then applying bronze powder while still wet to produce a metallic luster.

Browse - To search the Internet Web or another computer network or database for information.

Browser - A browser is a program that provides a way to look at, read, and hear all the information on the Web. The word "browser" seems to have originated prior to the Web as a generic term for user interfaces that let you browse text files online. By the time the first Web browser with a graphical user interface was invented (it was called Mosaic), the term seemed to apply to Web content, too. Technically, a Web browser is a client program that uses the Hypertext Transfer Protocol (HTTP) to make requests of Web servers throughout the Internet on behalf of the browser user.

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.

Buffer - (1) A device that separates the other devices in a system. (2) An intermediate area for the storage of electronic data.

Buffer Capacity - A measurement of the amount of data that can be stored in a frame buffer in a computer system.

Bug - A computer program error.

Bulletin Board Systems (BBSs) - Small, often local or regional repositories for electronic files and text messages related to a very specific topic. Although still used in some parts of the world where there is little or no Internet access, most every resource found on a BBS migrated to the Web.

CAD (Computer Aided Design) - The production of drawings and plans for architecture and engineering systems. CAD systems are very high-performance personal computers that employ CAD software packages and input devices such as graphic tablets and scanners.

CGM (Computer Graphics Metafile) - An American National Standards Institute/International Standards Organization metafile format for images of pretty much any kind.

Cache - Small portion of high-speed memory used for the temporary storage of frequently used data.

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

Calibrate - To adjust the scale on a measuring 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 - (1) The thickness of paper, usually expressed in thousandths of an inch (mils). (2) A device on a sheetfed press that detects double sheets or on a binding machine that detects missing signatures or inserts.

Callout - A portion of text, usually duplicated from accompanying text, enlarged, and set off in quotes and/or a box to draw attention to what surrounds it.

Camera-Ready - Copy and all other printing elements are ready photography.

Carbon Footprint - A measure of the amount of greenhouse gas emissions (measured as carbon dioxide equivalents, CO₂e) associated with the production, distribution and disposal of a product or service. Methods to determine carbon footprints of products, services and other organizational boundaries are still evolving.

Carbon Neutral - Achieving a net zero carbon footprint of a product, service or other organizational boundary by first reducing carbon emissions through reductions in energy and material use, switching to low or no carbon energy sources, recycling, reuse and then purchasing carbon offset credits to reduce the balance of the carbon footprint to zero. It is important to identify the scope and methodologies in making any carbon neutral claims as the methodology for measuring total carbon footprints is still evolving.

Case Bind - To bind using glue to hold signatures to a case made of binder board covered with fabric, plastic or leather. Also called cloth edition, hard bind or hard cover.

Cast-and-Cure - A holographic effect that uses a polypropylene film embedded with a nano-embossed pattern that is pressed into a wet UV coating and cured by a UV light source. After curing, the reusable film is removed from the substrate, leaving behind a holographic effect.

Cassette - (1) A portable housing or container for daylight transportation of either exposed or unexposed photographic materials, which makes it possible to operate an imagesetter in a daylight environment. (2) In magnetic tape applications, a plastic cartridge that contains tape which is 1/4 in. or narrower, takeup reels, and a read/record head pressure pad.

Cast Coated Paper - Paper dried under pressure against a heated, polished cylinder to produce a high-gloss enamel finish.

Catalog - (1) A list of items that records, describes, and indexes the resources of a collection, a library, or a group of libraries. Cataloging: the process of preparing a catalog or entries for a catalog. This includes the classification and assignment of subject headings for books and materials and determining all points of access to the record. (2) When the library and information community discuss metadata, the most common analogy given is the library catalogue record. Priscilla Caplan, for example, has defined metadata as a neutral term for cataloguing without the "excess baggage" of the Anglo-American

Cataloguing Rules or the MARC formats - The most well-known metadata initiative, the Dublin Core Metadata Element Set, has the specific aim of supporting resource discovery in a network environment.

CD-ROM - Compact disk—read only memory. A laser encoded optical storage disk that can store 650 Megabytes to over 1 Gigabyte.

Cell - A small etched or engraved depression in a gravure cylinder or flexo anilox that carries the ink.

Cell Volume - A measure of a flexo or gravure cell's capacity to carry ink; calculated as theoretical volume, liquid volume.

Cells per Inch (CPI) - The number of cells per inch on a flexo anilox or gravure cylinder.

Centimeter - Metric measurement of length. 2.54 centimeters = 1 inch.

CEPS - Color Electronic Prepress System.

Chain-of-Custody (COC) - A third-party certified system that traces the path logs take from the forest, through the pulp manufacturing process, to the paper mill, all the way through to the certified product sold to an end-user.

Chalking - Refers to improper drying of ink. Pigments dust off because ink has been absorbed too rapidly into the paper.

Character Generation - Constructing typographic images electronically as a series of dots, lines, or pixels on the screen of a cathode-ray tube (CRT).

Character Recognition - The function of systems that automatically read or recognize typed, printed, or handwritten characters or symbols and convert them to machine language for processing and storing in electronic systems. See also: optical character recognition.

Charge-Coupled Device (CCD) - CCDs are analog devices. Their charges equate to shades of light for monochrome images or shades of red, green and blue when used with color filters. Devices may use three CCDs, one for each of the red, green and blue colors. Although mostly replaced by CMOS sensors to capture images in cameras, camcorders and scanners, CCDs are still used in astronomy, microscopy and biomedical imaging because of their excellent sensitivity during long exposures.

Chill Rolls - On a web offset press, the section located after the drying oven where heatset inks are cooled below their setting temperature.

Choke - A slight size reduction of an opening into which an image will print.

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.

Chroma - The attribute of color that specifies its amount of saturation or strength.

Chrome - A slang term meaning the color transparency used as the original copy.

CIE - International Commission on Illumination. A standards institute most well known in the graphic arts for its work in color space definition.

CIE Color Spaces - These are three-dimensional color mapping systems such as CIE Lab, CIE L*a*b*, and CIE LUV that are used to plot the three color attributes, X, Y, Z. They are an integral part of color management systems and color workflows.

Client - A networked personal computer or workstation that requests information or applications from a centralized server.

Client/Server Environment - A network system that uses a designated computer for centralized resource access.

Clipboard - A temporary electronic storage area in a computer software program where text or graphics can be held for reuse.

Cloning - A function on a CEPS used to duplicate a pixel or many pixels in another area of a picture. It can be used to add or remove detail. Some manufacturers call this function "pixel swapping".

Closed Loop - A process in which all control functions have been automated, including sensing output errors and correcting the input to compensate for the error.

Cloud - A network of resources, software and information that resides on the Internet—"in the cloud"—rather than on the user's computer or server.

CMOS (Complementary Metal Oxide Semiconductor)
- The most widely used integrated circuit design. It is found in almost every electronic product from handheld devices to mainframes.

CMYK - Abbreviation for cyan, magenta, yellow and key (black), the four process colors.

Co-mail - Combine titles of publications on a pallet going to same destination to save you money when mailing. Typically used for Periodicals.

Co-palletize - Combine different companies' trays of letter-size mail onto a pallet going to same destination. Saves you money. Must be done via an authorized consolidation company.

Coated Paper - Paper with a coating of clay or other substances that improves reflectivity and ink holdout.

Coating - An unbroken, clear film applied to a substrate in layers to protect and seal it, or to make it glossy.

Collate - In binding, the gathering of sheets or signatures.

Collotype - A screenless printing process of the planographic ink-water type in which the plates are precoated with bichromated gelatin, exposed to continuous-tone negatives, and printed on lithographic presses with special dampening.

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 Bars - The color strip on proofs that is used as a guide for the printer in determining the amount and density of ink needed.

Color Cast - Discoloration of an entire image or portion of an image caused by an overabundance of one color.

Color Channel - Color images on the computer are created by combining different color channels. In RGB, the most commonly used color model, the channels are red, green and blue.

Color Correction - The deliberate adjustment of one or more colors to achieve a desired result. With inks, process colors are not pure colors; each is contaminated with the other two colors and has a hue error that requires compensation in the separation images.

Color Electronic Prepress Systems (desktop) - Computer systems using microcomputers and software for high-quality color manipulation and preparation.

Color Electronic Prepress Systems - In digital prepress, a high-end, computer-based system that is used to color correct scanner images and assemble image elements into final pages. Dedicated computer work stations and systems designed exclusively for highest-quality color manipulation and preparation. They are device-dependent systems.

Color Fidelity - How well a printed piece matches the original.

Color Key™ - 3M's negative overlay proofing films which visually simulate process printing inks.

Color Management Systems - Electronic

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

Color Proof - A visual impression of the expected final reproduction produced on a substrate with inks, pigments or dyes. 3M Match Print™, DuPont Cromacheck® and Kodak Double Check® are examples of color proofing systems.

Color Reference - A set of process inks printed on standard paper and used for color control.

Color Scanner - An electronic piece of equipment that utilizes a laser or other high intensity light to make color separation negatives from either reflective prints or transparencies.

Color Separations - The four-color negatives or positives which are the result of changing full color photos or art into the four process colors (yellow, magenta, cyan and black) by the use of filters.

Color Sequence - The order in which the four-color process inks are printed on the plate.

Color Specification System - Charts or swatches of preprinted color patches of blended inks, each with a corresponding number, used to allow designers, printers and customers to communicate color with more accuracy.

Colorimeter - An instrument for measuring color the way the eye sees it.

Comb Bind - To bind by inserting the teeth of a flexible plastic comb through holes punched along the edge of a stack of paper.

Combination Folder - A bindery machine or in-line finishing component of a web press that incorporates the characteristic of knife and buckle folders.

Commercial Register - Color printing on which the misregister allowable is within \pm one row of halftone dots.

Comingled Mailing - Combined mailing of magazines of the same size to the same address to save costs.

Composite Art - Mechanical on which copy for reproduction in all colors appears on only one surface, not separated into overlays. A tissue overlay is used to indicate color breaks.

Composite File - A PostScript file that represents color pages containing picture elements specified in terms of RGB (red, green and blue) color space as opposed to black and white "gray level" pages which represent separations.

Composite Proofs - Single test sheet showing position and color of all elements as stripped up.

Comprehensive - A detailed dummy or sketch of a design, intended to give a clear sense of how the finished piece should look.

Compression - Reducing the size of a file for storage purposes or to enhance the speed of data transfer by eliminating the redundancies and other unnecessary elements from the original. See also: data compression.

Computer-to-plate (C2P) - Describes a system in which the use of desktop publishing software, electronic prepress workstations and platesetters allows the imaging of metal plates for any format of press without the use of film, stripping or traditional platemaking. This process results in lower costs while shortening the amount of time needed to get a job on the press. Sometimes also called C2P to distinguish it from CTP, or computer-to-press.

Computer-to-plate (metal) - Producing metal plates directly from digital files without producing a set of film negatives.

Computer-to-plate (polyester) - Producing polyester plates directly from digital files without producing a set of film negatives.

Computer-to-press (CTP) - Describes a printing system that includes desktop publishing software, electronic prepress workstations and a new type of press which is capable of rapidly changing the images it is printing without the use of removable plates. Sometimes called CTP, to distinguish it from C2P, or computer-to-plate.

Concept Creation - Selecting images and generating and approving ideas from thumbnails and rough layouts during the graphic design process.

Condensed Type - Type whose width has been reduced without affecting its height.

Condition - To keep paper in the pressroom for a few hours or days before printing so that its moisture level and temperature equal that in the pressroom.

Conductivity - A property of fountain solutions that must be controlled along with pH.

Contact Print - A photographic print made from a negative or positive in contact with a sensitized paper, film or printing plate.

Contract Proof - A color proof of the job representing an agreement between the printer and the customer regarding how the printed product will look.

Content Proof - A proof that shows the customer the correct text and position of image elements but does not necessarily show accurate color reproduction.

Content Provider - One who owns or is licensed to sell content.

Continuous Tones - Commonly identified as the film for the four colors of a separation before it is broken into dots.

Continuous-Tone Digital Proofing (Contone) - Producing a proof with reliable color but no halftone pattern (photorealistic) directly from a digital file, usually by inkjet or dye sublimation process, without producing a set of film negatives.

Contrast - The amount of difference between the lightest and the darkest areas in a photo or artwork.

Conventional Dot - A halftone dot with the classic square format: middle tone dots are square, while the extremely small black dots or white openings are round.

Conversion - The process of preparing documents, capturing, and indexing current files for use on an imaging system.

Cookie - A collection of information, usually including a username and the current date and time, stored on the local computer of a person using the Web, used chiefly by web sites to identify users who have previously registered or visited the site.

Cooperation for the Integration of Processes in

Prepress, Press and Postpress (CIP4) - CIP4 is the committee responsible for turning JDF (Job Definition Format) into a workable specification. CIP4, and its predecessor CIP3, define a set of protocols for automated workflows for printing.

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

Copyfitting - Adjusting copy to the allotted space, by editing the text or changing the type size and leading.

Corrigendum - Error in a printed work discovered after printing and the separate sheet containing the correction. Plural is corrigenda.

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

Crash - Coarse cloth embedded in the glue along the spine of a book to increase strength of binding.

Creep - The shifting position of the page in a saddle-stitched bind. Creep moves the inside pages or signatures away from the spine.

CREF - Computer-ready electronic files.

Cromacheck® - DuPont's negative overlay color proof.

Cromalin® - DuPont's one piece proofing system in both positive and negative forms.

Crop - To opaque, mask, mark, cut, or trim an illustration or other reproduction to fit a designated area.

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

Cropping - (1) Indicating what portion of the copy is to be included in the final reproduction. (2) Trimming unwanted areas of a photograph film or print.

Cross Direction - In paper, the direction across the grain. Paper is weaker and more sensitive to humidity in its cross direction.

Crossmarks – Register marks.

Crossover - A reproduction that extends across two facing pages in a book or magazine and crosses over the binding.

CTP - Computer-to-press.

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

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

Cursor - The blinking line approximately the length of one character that, as displayed on a computer screen, marks the current working position in a file and can be moved to any other point in the file by shifting the position of the mouse and clicking on the new position, by clicking on a command in a dialog box, or by executing function key commands.

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.

Cutscore - A sharp-edged knife, several thousandths of an inch lower than the cutting rules in a die, made to cut part way into the paper or board for folding purposes. Scoring reduces paper cracking.



Cyan - One of the three subtractive primary colors used in process printing. It is commonly known as “process blue.”

Cylinder Gap - In printing presses, the gap or space in the cylinders of a press where the mechanism for plate (or blanket), clamps, and grippers (sheetfed) is housed.

DCS1, DCS2 Desktop Color Separation - Developed by Quark. A DCS1 file is composed of five files. The main file is a composite with a low-resolution preview and pointers to the separation files. There are four separations files, one for each process color. DCS2 adds spot color capabilities, and single file as well multi-file formats.

Dampening - Moistening non-image areas of lithographic plates with water-covered rollers.

Dampening System - The mechanism on a press for transferring fountain solution to the plate.

Data - Text, audio, video, and images stored in a form that can be understood by a computer.

Data Blocks - The maximum size of continuous data blocks that can be recorded as a single block of data. Larger data blocks transfer and store data more efficiently.

Data Compression - A software or hardware process that reduces the size of images so that they occupy less storage space and can be transmitted faster and easier. This process is accomplished by removing the bits that define blank spaces and other redundant data, and replacing them with a smaller algorithm that represents the removed bits. Data must be decompressed before it can be used. See also: compression.

Data Conversion - Technique of changing digital information from its original code so that it can be recorded by an electronic device using a different code. Data created in one software format may be converted to another before printing. Data must also be converted for various output devices, such as when RGB colors are converted to CMYK.

Data File - Text, graphics, or pictures that are stored electronically as a unit.

Data Integrity - (1) The fact that data are not modified. (2) Refers to the validity of data. Data integrity can be compromised in a number of ways: Human errors when data is entered; errors that occur when data is transmitted from one computer to another; software bugs or viruses; hardware malfunctions, such as disk crashes; natural disasters, such as fires and floods. There are many ways to minimize these threats to data integrity. These include: Backing up data regularly, controlling access to data via security mechanisms, designing user interfaces that prevent the input of invalid data, using error detection and correction software when transmitting data.

Data Mining - The increasingly sophisticated practice of gathering, analyzing and identifying patterns in data to create advantage. Used in marketing to better define and develop a deeper understanding of target audiences for increased efficiency and effectiveness. Explosion of e-commerce and social media have exponentially increased the amount and depth of data available to marketers.

Data Processing - (1) Changing raw data or information into a usable format by using a computer. (2) The systematic manipulation of information; for example, handling, merging, sorting, computing.

Data Shift - In process color printing, it describes a shift in one of the channels of data that comprise the image file and could cause inconsistent color in some areas in the image.

Data Transfer Rate – The sustained speed at which data is transferred within a computer or between a peripheral device and the computer, measured in bytes per second.

Database - An electronic program that is used to efficiently organize, store, retrieve, and modify information, such as a mailing list. The data can be quickly rearranged and sorted or searched alphabetically or numerically.

Database 2 - (1) Large compilation of information that can be immediately accessed and operated upon by a computer data processing system. Any organized collection of data, gathered and stored in a computer. (2) In electronic records, a set of data, consisting of at least one file or of a group of integrated files, usually stored in one location and made available to several users at the same time for various applications.

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

Deckel Edge - The untrimmed feathery edges of paper formed where the pulp flows against the wire of a paper making machine.

Decompress - To return compressed data to its original size and condition.

Default - A method or value that software will use in processing information unless the computer operator specifies otherwise. For example, a scanning program has default settings for variables like brightness and contrast that apply unless the user requests something else.

Delivery - (1) The section of a printing press that receives, jogs and stacks the printed sheet. (2) The output end of bindery equipment.

Densitometer - Instrument used to measure density. The densitometer measures the amount of light received from a sample. Reflection densitometers measure light reflected from paper and other surfaces. Transmission densitometers measure light transmitted through film and other materials.

Density - The amount an object absorbs or reflects light is called “density level.” High-density objects absorb or stop light; low-density objects reflect or transmit light.

Descender - The part of a lower case letter which extends below the main body, as in “p”.

Desensitizer - Chemical agent used to make non-image areas of a printing plate repellent to ink.

Desktop - (1) Any computer or peripheral small enough to fit on top of a desk, laptop computers may be counted as desktop computers. (2) A prefix attached to the name of many early personal computer categories that performed functions previously only available on larger computers. With the advent of smartphones and tablet, “mobile” replaced desktop as the prefix in vogue. (3) The graphical user interface (GUI) where screen elements are cast as icons or other representations that are meant to be analogous to a literal desktop.

Desktop Black and White Scanners - Used to make black and white negatives or positives of images or line art.

Desktop Color Separation (DCS) - A color file format that creates five PostScript files, one for each color (CMYK) and a data file about the image. Introduced by Quark, now used primarily for specialized graphics work.

Desktop Publishing - The creation of fully composed pages with all text and graphics in place on a system that includes a personal computer with a color monitor; word processing, page-makeup, illustration, and other off-the-shelf software; digitized type fonts; a laser printer; and other peripherals, such as an optical image scanner. Completely paginated films are output from an imagesetter. The term was more popular when personal computers emerged in the 1980s.

Desktop Publishing Stripping - Electronic assembly of all elements in final imposition for direct output as composite negative or plate.

Detail Enhancement - The technique of exaggerating picture image edges with unsharp masking or peaking, so the observer can easily see the detail of the original in the final reproduction.

Die - Device for cutting, scoring, stamping, embossing or debossing. **Die Stamping** - Printing from lettering or other designs engraved into copper or steel. Also called the intaglio process, it is used for the production of letterheads, business cards, etc.

Diecutting - Using sharp steel rules to cut special shapes from printed sheets. Diecutting can be done on either flatbed or rotary presses.

Digital - Method of representing information in numerical (binary) code. Unlike analog signals, digital ones are either "on" or "off." The "opposite of": analog device.

Digital Asset - Digital data stored in a file. It can be either data that was digitized, such as video frame data and audio samples, or data created in digital form, such as title graphics or animation frames. It can be stored in either a Media Data object or a raw data file. Also called Digital media data.

Digital Asset Management (Media Asset Management) - File or asset storage and retrieval by a company for its customer.

Digital Camera - A photographic system that transforms visual information into pixels that are assigned binary codes so that they can be manipulated, compressed and stored or transmitted as electronic files.

Digital Media Data - Digital data stored in a file. It can be either data that was digitized, such as video frame data and audio samples, or data created in digital form, such as title graphics or animation frames. It can be stored in either a Media Data object or a raw data file. Also called Digital asset.

Digital Photography - Direct electronic capture of an image within a camera without using film and processing.

Digital Plates - High speed or spark discharge plates that can be exposed electronically by digital data from a prepress system.

Digital Printing - Printing by plateless imaging systems that are imaged by digital data from prepress systems.

Digital Proof - Proof printed directly from computer data to paper or another substrate without creating separation films first. Proof made with computer output device, such as laser or inkjet printer.

Digital Soft Proof - A color video monitor display of a picture file, data file or text file. Also known as a soft proof.

Digital Workflow - In print publishing, using the computer to lay out text and illustrations prior to creating film negatives for every page or going directly to plate.

Digitize - To convert an image or signal into binary form.

Digitized Information - Text, photographs and illustrations converted into digital signals for input, processing and output in an electronic publishing system.

Digitizing Tablet - A device using a stylus and an x-y coordinate system to trace or draw images for input to a computer graphics system.

Dimensional Stability - Ability of a film to hold size throughout its cycle of use. Polyester-based films are more dimensionally stable than acetate bases; glass is more stable than polyester.

Direct Digital Color Proof (DDCP) - A proof made directly from the stored data file onto a substrate using a peripheral device such as a photographic exposure, dot matrix printer or ink jet printer without producing intermediate films.

Direct Screen - The method of color separating which adds dots at the same time the transparency is being photographically separated into the four colors.

Direct-to-plate - Often used as a synonym for computer-to-plate but less desirable to use because the acronym DTP can be confused with desktop publishing, which is also known as DTP (see computer-to-plate).

Direct-to-press Imaging - Unimaged plates are automatically mounted on the plate cylinder and then imaged with laser beams from digital data.

Disk, Hard (Hard Drive) - A platter-like magnetic storage device permanently encased in a computer system.

Disk Drive - The mechanism that rotates the magnetic disk and positions the read/write head(s) at the desired location.

Disk Track - One of several concentric circular recording bands where data is stored on a magnetic disk. Each track may consist of several sectors with a fixed memory capacity.

Dither - To fill the gap between two pixels with another pixel having an average value of the two to minimize the difference or add detail to smooth the result.

Document - (1) Recorded information regardless of physical form or characteristics. Often used interchangeably with record. (2) An individual record or an item of nonrecord materials or of personal papers. A collection of information that is processed as a unit.

Document Content - Document Content refers to the substance of the material or information within the document that is intended to be communicated.

Dot - The individual element of a halftone.

Dot Area - The size of the dot is indicated by the percentage of the area it occupies from zero to one hundred percent.

Dot Etching - Applying chemicals by hand to either negatives for increasing dot size which adds color; or, to positives for decreasing dot size which subtracts color.

Dot Gain - The increase in the printing dot size from the halftone film to the printed substrate resulting in darker tones.

Dots Per Inch (DPI) - A unit that describes the resolution of an output device or monitor.

Double Black Duotones - Image created from two halftones, one for highlights and the other for midtones and shadows. Both plates are inked with black for the most contrast.

Double Burn - Utilizing two or more negatives to expose an image on a plate or positive print.

Download - To transfer a file or files from a remote computer to a local computer's hard drive.

Drawdown - Sample of inks specified for a job applied to the substrate specified for a job.

Drier - A substance added to ink to hasten drying.

Drop Out - The technique that can give a mediocre photo greater contrast by photographically removing some dots to create highlights that show the actual white of the paper.

Drum - The common name for the photoconductive cylinders used on scanners and plotters.

Drum Scanner - Color separation equipment on which the original transparency is wrapped around a hollow, plastic rotary cylinder.

Dryer - A unit on a web press that hardens the heatset ink by evaporating the solvent ingredient in it.

Drytapping - Printing one or more layer of ink and then letting it dry before printing additional inks or varnishes on the same area.

Dummy - A layout showing the size, shape, form and general style of a piece of printing.

Duotone - Two films are made by changing the screen angle for each and one plate is made for each film. A duotone is printed in two colors but both plates can be used for the same color ink for maximum contrast. When using black ink this is called a "double black".

Duplex Paper - Paper with a different color or finish on each side.

Dylux® - DuPont's light-sensitive proof in blue or black.

Dynamic Web Pages - Web pages, birthed at the time they are downloaded, often contain up-to-the-second data pulled into a template. Search engine results pages are dynamically generated.

EPS - Abbreviation of Encapsulated PostScript. Pronounced as separate letters, EPS is the graphics file format used by the PostScript language. EPS files can be either binary or ASCII. The term EPS usually implies that the file contains a bitmapped representation of the graphics for display purposes. In contrast, PostScript files include only the PostScript commands for printing the graphic.

Easter egg - A small cartoon, animation, or other feature hidden by a programmer in the code of a game or application and triggered by an arcane sequence of keystrokes or mouse clicks.

Electronic Data Interchange (EDI) - (1)The communication or transmission of data as electronic messages according to established rules and formats in order to transact business. (2)The computer-to-computer exchange of formatted, transactional information between autonomous organizations. (3)EDI is the exchange of routine business transactions in machine readable format. It covers many areas including, ordering, pricing, quoting, backordering, shipping, receiving, planning purchases as well as invoicing and payments. There are two competing standards: EDIFACT and ASC X12.

Electronic Dot Generation - Method of producing halftones electronically on scanners and prepress systems.

Electronic Publishing - A configuration of hardware and software used for digital page composition. The term includes desktop publishing and high-end systems.

Electrophotography - Image transfer system used in copiers to produce images using electrostatic forces.

Electrostatic Printing – A printing process that uses electrostatic charges to transfer images onto a surface which then attracts toner in only the charged areas. The toner is bonded to the sheet by heat.

Elemental Chlorine-Free (ECF) - ECF indicates paper made from either virgin or recycled fiber that is bleached using alternative chlorine compounds (such as chlorine dioxide) as a substitute for elemental chlorine. ECF bleaching reduces harmful byproducts, relative to elemental chlorine bleaching. The ECF process has been recognized by both the European Commission and the United States Environmental Protection Agency as “Best Available Technology.” According to the Alliance for Environmental Technology, more than 85 percentage of the world’s bleached chemical pulp makes use of ECF bleaching technologies.

Elliptical Dot - An elongated or oval halftone dot used to minimize the midtone jump in dot gain at the point where dots are large enough to connect.

Em - A measure of space exactly as high and wide as the point size of the typeface being used.

Em Dash - A dash, one em long, used to separate parenthetical phrases within a sentence.

Emboss - To press an image into paper so it lies above the surface.

Emoticons (Emoji) - A pictorial expression of a feeling in a message rendered as text or an icon, such as pleasure [:-)] or sadness [:-)].

Emulsion - The light-sensitive coating on photographic film, plates or stencils.

En - A measure of space equal to one-half of an em space in the same point size and typeface.

En Dash - A dash, one en long, used to indicate range as in “see pages 4–5.”

Enamel - A term applied to a coated paper or to a coating material on a paper.

Encapsulated PostScript (EPS) - A file format used to transfer PostScript™ image information from one program to another. EPS images can be sized without loss of quality at different resolutions. PDF files may be used for the same purpose.

Encapsulation - In programming, the process of combining elements to create a new entity. For example, a procedure is a type of encapsulation because it combines a series of computer instructions. Likewise, a complex data type, such as a record or class, relies on encapsulation. Object-oriented programming languages rely heavily on encapsulation to create high-level objects . Encapsulation is closely related to abstraction and information hiding.

Encryption - To alter (a file, for example) using a secret code so as to be unintelligible to unauthorized parties.

End Sheet - Sheet that attaches the inside pages of a case bound book to its cover.

Engraved Cylinder - An image carrier with recessed image areas that are filled with ink, which is then transferred to the substrate. Engraved, or intaglio, cylinders are often used in the gravure process.



Engraving - Printing method using a plate, also called a die, with an image cut into its surface.

Enhanced Multi-color (“High-fidelity”) Printing - Full-color printing using six, seven or more “process” colors instead of the traditional four.

Estimate - A statement of what a print job will probably cost based on specified quantities, materials and labor.

Estimating - The process of determining approximate cost, specifying required quality and quantity, and projecting waste.

Environmentally-friendly Processes - Reduced-chemical, silver and VOC-free processes for preparation of printed materials.

Etch - To use chemicals to carve an image into plates and film or an acid solution used to desensitize the non-printing areas of the plate.

Ethernet - The most widely used local area network (LAN) technology. Defined as the 802.3 standard by the IEEE, the Ethernet access method is used to connect computers in a company or home network as well as to connect a single computer to a modem for Internet access. Almost every reference to "network ready," "LAN" or "LAN connection" implies Ethernet. Ethernet uses cables and cords. WI-FI is its wireless counterpart. Both technologies are used together.

Exposure - The quantity of light that is allowed to act on a photographic material. The product of the intensity and the duration of the light acting on the emulsions.

Face - Edge of a bound publication opposite the spine.

Fadeometer – An instrument used to measure the fading properties of inks and other pigmented coatings.

Fake Color - Producing a color illustration by using one image as a key and making the other separations from it manually.

FAQ - Frequently-asked-questions.

Fanout - Distortion of paper on the press due to waviness in the paper caused by absorption of moisture at the edges of the paper, particularly across the grain.

Feeder - The part of the press that separates the sheets of paper and feeds them into position for printing.

Felt Side - The smoother side of the paper.

Fifth Color - Non-process or premixed ink color used in addition to the four process colors.

File - A collection of digital information stored together as a unit on a computer disk or other storage medium and given a unique name, which permits the user to access the information. A file may contain text, images, video, sound, or an application program.

File Allocation Table (FAT) - A hidden record of how files are stored in clusters on a hard or floppy disk.

File Server - A workstation primarily responsible for redirecting resources across the network. Dedicated file servers require that the computer running the server software not be used for other tasks. Nondedicated servers permit the administrative tasks and the shared resources to be spread over various network nodes.

File Transfer Protocol (FTP) - The tool used to retrieve information in the form of electronic files from any number of computer systems linked via the TCP/IP protocol. Users in effect transfer copies of information found on remote computers either directly to their own computers or to a service provider's network and then to their own computers.

Filling In (Filling Up) - A condition where ink fills the area between the halftone dots or plugs up (fills in) the type.

Firewall - The layer of security that protects internal computer networks from outside intrusions, particularly from the Internet.

Filler - Inorganic materials like clay, titanium dioxide, calcium carbonate, and other white pigments added to the papermaking finish to improve opacity, brightness, and the overall printing surface.

Fill-up - Occurs when ink fills the area between the halftone dots or plugs of the type.

Film Assembly - Positioning, mounting and securing various individual films to one carrier sheet in preparation for platemaking.

Fine Paper - Paper made specifically for writing or commercial printing, as opposed to coarse paper and industrial paper.

Fingerprint - To test a printing press to determine its exact printing characteristics, such as its dot gain, ink density and trapping, for the purpose of customizing color separations for those printing conditions.

Finish – (1) General term for trimming, folding, binding and all other post-press operations. (2) Refers to the surface characteristics of paper.

Flat – (1) The assembled composite of negatives or positives ready for platemaking. (2) A term used to describe a photograph that is lacking in contrast.

Flatbed Scanner - A color scanner on which the original is mounted on a horizontal table instead of a rotary drum.

Flat Colors – (1) Colors and tints that are not formulated from standard process colors. (2) Color that seems weak or lifeless.

Flat Stamping - The simplest and most economical foil stamping process; it does not perceptibly raise the stamped area above the surface, and usually leaves no impression on the reverse side of the sheet.

Flexography - A printing process that uses a raised surface of flexible rubber or photopolymer printing plate mounted on a rotary drum and thin, fast-drying inks to print on almost any roll stock.

Flocking - The application of fine natural or synthetic particles to an adhesive surface. Like thermographic printing, the fibers stick to the adhesive area and the rest is vacuumed away.

Flop - Reversing a transparency or negative so that what was on the right side is now on the left.

Flush Cover - A cover trimmed to the same size as the inside text pages.

Fly Leaf - The half of the end sheets not glued to the front and back covers of a case bound book.

Flying Paster - An automatic pasting device that splices a new roll of paper onto an expiring roll without stopping the web press.

Foil Stamp - To press a heated die onto a sheet of foil, releasing the foil from its backing and adhering it to a substrate.

Folio - In typesetting, the typeset page number. Right hand pages contain the odd number folios.

Fold - Bending and creasing a sheet of paper as required to form a printed product.

Font - A complete set of type characters in one typeface and type size.

Foot - The bottom of a page or book.

Foot Margin (also tail margin) - The distance between the bottom edge of the body of type (text) on a page and the bottom edge of the trimmed page.

Form - Each side of a signature.

Form Roller - A roller which comes in contact with the printing plate, bringing it water or ink.

Format - (1) The sequential organization of data in terms of its components. Also: A specific arrangement of data. (2)a. The shape, size, style, and general makeup of a particular record. (2)b. In electronic records, the arrangement of data for computer input or output, such as the number and size of data fields in a logical record or the spacing and letter size used in a document. Also called layout. See also FILE LAYOUT, RECORD LAYOUT. (2)c. In microform records, the placement of microimages within a given microform (image arrangement) or the arrangement of images in relation to the edges of the film (image orientation).

For Position Only (FPO) - Refers to inferior quality copies of photos or art used on mechanicals to indicate placement and scaling, but not intended for reproduction.

Fountain Solution - A mixture of water and chemicals that dampens a printing plate to prevent ink from adhering to the non-image areas.

Four-color Process - Use of cyan, magenta, yellow and black to create a full color image.

Free Sheet - Paper made from cooked wood fibers mixed with chemicals and washed free of impurities.

Frequency - The lines per inch (lpi) in a halftone screen.

Frequency-modulated Screening (FM) - A computerized method for digital screening. See stochastic screening.

Front End System - The computer hardware on which application software used to prepare pages of type and graphics is run.

FTP - File Transfer Protocol is the language computers speak to transfer files between systems over the Internet.

Fugitive Color - A color that tends to change or fade under different lighting, in the presence of heat or other changes in the environment, or over time— an unstable color.

Fugitive Glue - Adhesive used to affix items to a printed piece (such as plastic or paper cards, magnets, etc.). Allows for removal of the item without tearing the carrier piece. Sometimes called "booger glue"!

Fulfillment - The storing of a customer's materials until that customer requests delivery to itself or to a third party. Also, the fulfilling by a vendor of a request received from a customer by phone, by mail or by electronic means. Also known as "pick and pack."

Full-scale Black - A black printer separation that prints dots in every part of the picture, from the highlight to the shadow. Also called full-range black.

Full-size Color Scanners (PMT) - "Traditional" large format, drum type "high end" scanners to bring color prints or negatives into a computer for manipulation, separation or printing.

Fuzz - Fibers projecting from the surface of a sheet of paper.

Galley Proof - A printout of text used for proofreading before final page assembly.

Gamma - A measure of contrast in photographic images.

Gang - To halftone or separate more than one image in only one exposure. Also to print two or more finished products on the same sheet during one press run.

Gapless Press - A web press with special blanket cylinders that, with each rotation, allow more printing per square inch. This larger print space plus a shorter cutoff point can save a significant amount of paper on large runs.

Gateway (Router) - Software or hardware that enables communication between computer networks that use different communications protocols.

Gather - To assemble folded signatures in proper sequence.

Gear Streaks - Parallel streaks appearing across the printed sheet at the same interval as the gear teeth on the cylinder.

Ghosting - Phenomenon on a faint image on a printed sheet where it was not intended to appear.

Giclee Prints - Pronounced "jee-clay" and French for "sprayed ink," these are prints made with inkjet technology. Fine art prints and posters for the most part. The main issue to consider is archival quality. Most of these inks are water-based and may fade over time. Some at least are pigment based and therefore more archival.

GIF - The Graphic Interchange Format is a compression format for images. Pictures and graphics you see on Web pages can be in GIF format because the files are small and download quickly.

Gigabit (Gb) - One billion bits.

Gigabyte (GB) - One thousand megabytes or one billion bytes.

GHS (Globally Harmonized System) of Classification and Labeling - Is an internationally agreed upon system of chemical labeling and classification. It was adopted by the United States in 2012 updating the existing Hazard Communication Standard.

Glyph - A single letter, symbol or number from a font.

Goldenrod Paper - Specially coated masking paper in yellow or orange used by strippers to assemble and position negatives for exposure on plates.

Gradation - The relationship of the tonal values of an image to its intermediate films and reproduction as well as magnetic or optical representation. It may also refer to the tonal values within the picture.

Grain - The direction in which most fibers are aligned.

Grammage - The metric basis weight of paper. Weight is expressed in grams per square meter.

Graphic Arts - The visual reproduction of type and images by any of the several printing processes.

Graphic Communications - Allied industries, including printing, publishing, advertising and design, that participate in the production and dissemination of text and images by printed or electronic means.

Graphical User Interface (GUI) – Pronounced "goeey" and used in digital imaging, this is a technical term for a system that lets users manipulate files by pointing to pictures (icons) with a mouse or other pointing device instead of having to type in key commands.

Gravure - The process of printing from cylinders that contain cells that hold the ink for transfer to the substrate. In gravure color printing, each succeeding color is printed on a dry color, rather than one still wet as in letterpress and offset lithography.

Gray Balance - The proper amount of cyan, magenta and yellow printing to produce a gray scale with no apparent dominant hue.

Gray Component Replacement (GCR) - A color separation process that uses the black printer for the neutral gray portion of any color. Instead of mixing cyan, magenta and yellow to produce those grays, they are replaced with black ink. GCR deepens the shadows in an image that lacks depth. GCR completely replaces the grays with process black, unlike UCR which reduces process colors in the neutral grays and adds black.

Gray Stabilization - Ability to maintain neutral gray balance during a color reproduction. The use of GCR helps to stabilize neutrals.

Greenhouse Gas (GHG) - A collective term for the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride, which, according to most scientists, contribute to climate change.

Grindoff - The approximately 1/8 inch (3mm) that is removed along the spine of gathered signatures before perfect binding.

Gripper Edge - The leading edge of a sheet which is held by the grippers.

Gripper Margin - The unprintable area of the paper where it is gripped as it passes through a printing press. Usually measures a half inch or less.

Grippers - Metal fingers that clamp onto the paper and control its flow as it passes through the press.

Gum Arabic - In offset lithography, used in platemaking and on press to protect the non-printing areas of plates.

Gumming - In platemaking, the process of applying a thin coating of gum to the non-printing areas of a lithographic plate.

Gutter - The inside margin of a bound page.

Hairline Register - Register within plus or minus one-half row of dots.

Halftone - An image composed of tiny dots whose variations in size create the illusion of variations in tone. Traditionally, a halftone screen was used to convert a continuous tone image into a halftone; such screening is currently done electronically.

Halftone-based Digital Proofing - Producing a proof with reliable color and halftone pattern directly from a digital file, usually by electronic process, without producing a set of film negatives.

Hard Copy - A printed paper copy of output in readable form. It is also a transparency film or photograph of an image displayed on the monitor.

Hard Dots - Second generation dots or laser-generated dots that have hard edges without any fringe.

Hard Proof - A color proof made on a substrate from production films or on a substrate directly from the stored pixel data. The latter is usually referred to as a digital hard proof, and a video proof as a digital soft proof.

Hazard Communication Standard - An OSHA regulation that requires chemical manufacturers, suppliers and importers to assess the hazards of the chemicals that they make, supply or import, and to inform employers, customers and workers of these hazards through safety data sheets (SDS), labeling and training.

Head - The top of a page or book.

Heatset - Web printing process whereby non-absorbent paper goes through the press and the ink is dried by heat. Hickey - Spot on a printed sheet usually due to dust, lint or bits of paper.

Hickey - In offset lithography, spots or imperfections in the printing due to dirt on the press, dried ink skin, paper particles, etc.

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

HLS/HSV - Abbreviations for hue, lightness and saturation and hue saturation and value. These are different names for the same color-control options found in most desktop software.

Holdout - A property of coated paper with low ink absorption which allows ink to set on the surface with high gloss. Too much holdout can cause ink to rub off or mark the next sheet.

Holograph - A three-dimensional image of an object that is captured on a photographic film or plate, using a laser as a light source.

Horizontal Line Screen (Straight Line Screen) - Once a characteristic of graphic high-contrast black-and-white Kodalith film for printing, horizontal and vertical line screens are simulated today using a software filter.

Hot Spot - Printing defect caused when a piece of dirt or an air bubble caused incomplete drawdown during contact platemaking, leaving an area of weak ink coverage or visible dot gain.

House Sheet - Paper kept in stock by a printer and suitable for a wide variety of printing jobs.

HP Indigo - A fully digital liquid-toner printing system that enables every element to be varied as required.

HSV (Hue, Saturation, Value) – Brilliance or Luminance. A color space used in some graphic programs.

HTML (Hypertext Markup Language) - Is used to structure text and multimedia documents and to set up hypertext links between documents, used extensively on the Web.

HTTP (Hypertext Transfer Protocol) - Used to request and transmit files, especially Web pages and Web page components, over the Internet or other computer network.

Hue - The attribute of color that designates its dominant wave length and distinguishes it from other colors.

Hybrid Printing - Methods of printing that combine stochastic and conventional printing techniques to create the illusion of continuous tones. Although the techniques vary, they generally use stochastic techniques in the highlights and shadows and traditional screening elsewhere.

Hypertext - A computer-based text retrieval system that enables a user to access particular locations in Web pages or other electronic documents by clicking on links within specific Web pages or documents.

Icon - In a computer system, a picture or drawing, such as a paint brush or trash can that represents a file or function. Clicking the mouse on the icon activates the procedure or opens the file.

Illustration Software - Software used to generate vector-based images.

Image - The digitized representation of a graphic element (photograph, painting, film) bitmapped in computer memory for display on a video monitor for output in paper or film form.

Image Area - On a lithographic printing plate, the area that has been specially treated to receive ink and repel water.

Image Capture - The process of converting photographs or other artwork into digital data so that they can be used in computer-based layouts.

Image Carrier - The device on a printing press that carries an inked image either to an intermediate rubber blanket or directly to the paper or other printing substrate. A direct printing letterpress form, a lithographic plate, a gravure cylinder and a screen used in screen printing are examples of image carriers.

Image Editing Software - Software programs used for working with pixel-based images to refine, enhance and manipulate them, as well as to create graphic elements.

Image to Plate on Press - Technology that images one or more plates in position on press for color reproduction.

Image Processing - The alteration or manipulation of images that have been scanned or captured by a digital recording device. Can be used to modify or improve the image by changing its size, color, contrast, and brightness, or to compare and analyze images for characteristics that the human eye could not perceive unaided. This ability to perceive minute variations in color, shape, and relationship has opened up many applications for image processing.

Imagesetter - A high-resolution laser output device that writes data on photosensitive paper or film. The data is processed by a RIP and can record halftones and line images as well as type.

Imposition - The process of placing graphics into predetermined positions on a press-size sheet of paper. Page layout is the process of defining where repeating elements such as headlines, text, and folios (page numbers) will appear on multiple pages throughout a document, while imposition can be thought of as defining where these completed pages will appear on much larger sheets of paper.

Imposition, Head-to-Head - Arranging pages on a form during stripping so that the top of one page is located adjacent to the top of the opposite page.

Imposition Layout - A guide that indicates how images should be assembled on the sheet to meet press, folding, and bindery requirements.

Imposition Systems - Step-and-repeat imaging cameras or computerized methods of assembling the units of pages into signatures for printing. The latter method is often referred to as digital imposition.

Impression - One sheet passing once through the press.

Impression Cylinder - The hard metal cylinder that presses the paper against the inked blanket cylinder, transferring the inked image to the substrate. The impression cylinder on most sheetfed presses uses paper grippers to hold the sheet through its rotation.

Imprinting - To print new copy on a previously printed sheet, such as imprinting an employee's name on business cards.

Indexed Color Images - An image where each pixel value is used as an index to a palette for interpretation before it can be displayed. Such images must, therefore, contain a palette which has been initialized specifically for a given image. 8-bit indexed images are still widely used to save bandwidth and storage space.

Infeed - (1) The section of a sheetfed press where the sheet is transferred from the registering devices of the feedboard to the first impression cylinder. (2) The set of rollers controlling web tension ahead of the first unit on a web press.

In-line - Components of a system arranged in a logical production sequence and in such a way that materials are automatically fed to the next component. An example would be a coating tower on a press to apply the lacquer or UV coating on the same pass as the color.

Indirect Screen - The process of first separating a photo or artwork into the four process colors by creating continuous tones. The dots are then added using an additional process.

Ink - A printing ink is a dispersion of a colored solid (pigment) in a liquid, specially formulated to reproduce an image on a substrate.

Ink Balance - Relationship of the densities and dot gain of process inks to each other and to a standard density of neutral gray.

Inking System - The section of a lithographic press that controls the distribution of ink to the plate.

Ink Jet - A method of printing images using jets that squirt minuscule drops of ink onto a variety of surfaces.

Ink Fountain - In printing presses, the device that stores and supplies ink to the inking rollers.

Ink Substitution - Substituting one of the CMYK colors in four-color process printing as a way to heighten or alter color impact without the need for more costly touch plates. Typically, this involved substituting cyan, magenta or yellow with a match color that is close in range.

Ink Train Aqueous - Aqueous coating that does not require a coating tower. The thick viscosity enables printers to work the coating with an ink knife, while ensuring it won't run through the ink keys. The coating can be run inline or offline with presses that do not have dryers.

Inkometer - In ink testing, an instrument for measuring the tack of printing inks.

Inplant - A department or division of a company that usually does printing for only that company.

Insert - A printed piece prepared for insertion into a publication or another printed piece.

Intaglio - Method of printing in which the image is etched below the non-printing surface. Gravure and engraving are the most common forms.

Integrated Services Digital Network (ISDN) - An international standard for switched, digital dial-up telephone service for voice and data. Analog telephones and fax machines are used over ISDN lines, but their signals are converted into digital by the ISDN terminal adapter.

Intelligent Character Recognition (ICR) - A sophisticated form of optical character recognition (OCR) in which the computer determines the probable meaning of a character not by looking for an exact match with a character pattern stored in memory but by analyzing the shape of the character. ICR is, therefore, able to interpret a wide range of different typefaces and point sizes, thus differing from OCR, which is restricted to the specific face and point size combinations stored in the memory. See also: optical character recognition.

Intensity - The measurement of color from dull to brilliant. **Interface** - (1)The electronic device that enables one kind of equipment to communicate with or control another. (2)The combination of hardware and software that allows different electronic devices to share resources.

Internet - The “official” name for an international network of computer networks linked to provide and share information and resources about a seemingly limitless number of topics.

Intranet - A private network within an organization (always lower case). Firewalls often keep Internet traffic off an intranet.

IP - Internet Protocol is the language that allows computers to communicate over the Internet, defining how data is cut up into packets and addressed in order to reach its destination.

ISO - International Standards Organization.

ISP - Internet Service Provider

JPG - Joint Pictures Expert Group. The committee which set standards for a file format for graphics. The JPEG file format is a compressed format, with some loss of quality during compression. A popular web format do to the generally small size of pictures. File formats of .jpg, .jpeg, and .jpe.

JDF - A data exchange standard that will act as a universal electronic job ticket that contains control data from print buying through estimating, customer service, prepress, press, finishing, and dispatch. JDF contains production information rather than content data. See CIP4. JDF is designed to streamline information exchange between different applications and systems.

Java - A trademark used for a programming language designed to develop applications, especially ones for the Internet that can operate on different platforms.

JavaScript - A widely used programming language that is embedded in most Web pages. Supported by all Web browsers, it enables interactive functions to be added to Web pages, which are otherwise static.

Job Specifications - A detailed description of the requirements of a print job.

Job Ticket - Form used by service bureaus, separators and printers to specify the production schedule of a job and the materials needed.

Jog - To align the edges of a pile of paper by hitting or shaking against a flat surface.

K - Abbreviation for black in four-color process printing.

Kelvin - A unit of measure used to describe the color temperature of a light source, such as the 5000K standard viewing conditions.

Kerning - In typesetting, subtracting space between two characters, moving them closer together. Negative letterspacing can apply to two letters (kerning) or to any other group of letters.

Key Plate - Negative or plate that prints the most detail (usually black) and to which other plates are aligned.

Keyline – (1) An outline drawing of finished art to indicate the exact shape, position, and size for such elements as half-tones, line sketches, etc. (2) In the Midwest, a synonym for Paste-Up.

Kilobyte - K, Kb or KB. A unit of measuring digital information which equals 1024 bytes.

Kiss Cut - To die cut the top layer but not the backing of self-adhesive paper.

Kiss Impression - Lightest possible impression that will transfer ink to a substrate.

Knife - In folding machines, the three or four blades at different levels and at right angles to each other that force the paper between the folding rollers. The sheet of paper is pushed from one knife folding mechanism to the other until the desired number of folds have been made.

Knock Out - To clear an area of absolutely every printing dot; or to outline an image and drop out all dots surrounding it.

Kraft Paper - Strong brown paper made with unbleached wood pulp and used for grocery bags, envelopes and wrapping paper.

Lacquer - A clear resin/solvent coating, usually glossy, applied to a printed sheet for protection or appearance.

Laminate - To bond a plastic film by heat and pressure to a printed sheet for protection and appearance.

LAN (Local Area Network) - Workstations and personal computers in an office are commonly connected to each other with a LAN. This allows them to have send/receive files and/or have access to the files and data. Each computer connected to a LAN is called a node.

Lap Register - Register where ink colors overlap slightly.

Large-format Imagesetter - In-house equipment to output computer files, typically full impositions, to strippable films 23" x 35" or larger.

Laser (Light Amplification by Stimulated Emission of Radiation) - The laser is an intense light beam with very narrow bandwidth used in digital-imaging devices to produce images by electronic impulses from computers or facsimile transmission.

Laser Die-cut - Instead of using a metal die to cut a substrate such as paper, this process uses a laser beam to precisely burn or vaporize the sheet to create highly detailed images that are too complex to do with traditional dies

Layout - A drawing that gives the general appearance of the finished piece and usually indicates the relationship between illustrations and copy.

LCD (Liquid Crystal Display) - The primitive, two-tone screen of a digital watch, a pager, or a vintage computer.

Leading - (ledd-ing) The linespace, or white space, between lines of copy measured in points.

Leaf - One sheet of paper in a publication. Each side of a leaf is one page.

Lenticular - A printing technology in which a lenticular lens is used to produce an image with an illusion of depth, or the ability to change or move as the image is viewed from different angles. The process requires having multiple digital images, which are then interlaced using a special software to interact with the lenticular lens and produce the desired effect when printed.

Letterpress - A method of printing where the wrong-reading raised surface of a printing plate is inked and impressed directly onto the paper. There are four types of letterpress presses; platen, flatbed cylinder, rotary and belt.

Line Copy - High contrast images or type without shading which do not require halftone screening.

Lithography - Method of printing using plates whose image areas attract ink and whose non-image areas repel ink. The images are first printed onto a rubber blanket and then offset to paper.

Live Matter - The vital parts or elements of a printed piece which must not be trimmed off.

Long Ink - An ink that has good flow on ink rollers of a press. If the ink is too long, it breaks up into thin filaments on the press, and causes flying as on a newspaper press.

Lossless Compression - Lossless compression retains all pixel data for images and image integrity is retained. This type of compression is recommended for high-contrast images, line art, and text. Lossless compression techniques used for PDF files are ZIP, CCITT Group 3 and 4, and Run Length Encoding.

Lossy Compression - Lossy compression uses algorithms designed to compress the file by selectively removing portions of the images. The portions that are removed are the details that the human eye does not pick out very well, so it usually does a good job of removing data. Some of the image information (detail) is lost in this method however, and artifacts or noise may be picked up in some images. The lossy techniques that are available in Acrobat Distiller when making your PDF are JPEG, Subsampling, Downsampling, and Bi-cubic Downsampling.

Loupe - Lens built into a small stand. Used to inspect copy, film, proofs, plates and printing.

LPI (Lines Per Inch) - Acronym for lines per inch. Used as a measurement of resolution or halftone screening.

M - The abbreviation for magenta in the four-color process. Also the abbreviation for "one thousand".

MNG - (pronounced "ming") The proposed Multiple Network Graphics format is a multi-image extension of the existing PNG format.

MP3 - A digital audio file format with CD quality that lets Internet users download songs to a PC or to a portable player.

MP4 - MP4 files are supported by most software media players and many Blu-ray/DVD players as well. They are a common format for movie downloads, and Blu-ray players with front-panel USB ports are generally capable of playing MP4 movies directly from a USB drive.

MacBinary II - Mac Binary II (sometimes simply called MacBinary) is a format for representing all the information in a Macintosh file in one binary file. It is useful for storing a Macintosh file on a non-Macintosh system for later retrieval. Unlike BinHex, MacBinary II is a compact format that cannot be passed through most e-mail systems. MacBinary II files usually have names ending in ".bin". Most FTP programs can get and put files in MacBinary II format. Most FTP programs can also get files in MacBinary I format (an earlier version of the MacBinary standard).

Magenta - One of the three subtractive primary colors of process printing. It is commonly called "process red."

Makegood - The rerun of an ad or printed piece by a publisher or printer because of their error.

Makeready - The process of setting up and adjusting a printing press for a particular ink, paper and set of printing conditions prior to a press run. Also, the paper used during these adjustments.

Margin - The blank space around the image area of a page, also referred to as a gutter.

Markup Language Encoding - (1) A computer markup language is a means for describing, for an electronically stored document, the complete positioning, format, and style of text and image segment representations within the document. When combined with textual representation, it is a means for achieving fully formatted text. When combined with relevant image information about document graphics material, it may be a means of archiving fully reversible compression of the document. An example of a markup language is SGML (Standard Generalized Markup Language) that has been adopted by the United States Government and by many publishers as a pseudo-standard. (2) Markup. Text that is added to the data of a document in order to convey information about it.

Mask - An opaque overlay placed over any part of a photo or separation negative that should not be exposed to light.

Master - To etch pits (tracks) into the Glass Master (acts like a negative) from which a CD-ROM "stamper" is made. Mastering/pressing CD-ROMs - Preparation of compact disc read only memory (CD-ROM) discs from customer-supplied materials as alternative or value-added sales opportunity.

Matchprint™ - 3M's negative or positive single sheet proofing system which simulates SWOP specifications.

Material Safety Data Sheets (MSDS) – Prior to 2016 -

A product specification form used to record information about the hazardous chemicals and other health and physical hazards employees face in an industrial workplace, along with guidelines covering exposure limits and other precautions. Employers are required to compile and maintain files of this information under the OSHA Hazard Communication Standard set forth by the U.S. federal government. See Safety Data Sheet (SDS).

Mechanical - Complete pages, with text, line art and crop marks in position, ready to be photographed or output to film.

Mechanical Binding - Clasp individual sheets together with plastic, small wire, or metal rings. Two examples are three ring binding and spiral binding.

Megabit, Mb - One million bits. Megabyte, MB - One million bytes.

Menu-Driven - The graphical user interface of a computer program that allows the user to direct operations by selecting from a series of hierarchical choices displayed on the monitor.

Metameric Colors - Colors that can change their perceived hue depending on the different lighting conditions.

Metric System - A decimal system adopted by most countries for solid, liquid and distance measurements.

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

Mirafoil (Liquid Foil) (Super Silver) - This metallic UV-cured coating, used to create a foil- or chrome-like finish, goes by many names—Mirafoil, Liquid Foil, and Super Silver. Essentially it is mixed like an ink but looks like a foil when dry and it is applied inline.

Misregister - Printed images that are incorrectly positioned, either in reference to each other or to the sheet's edges.

Modeling - The apparent detail in a picture indicating that the objects are three dimensional; having surface texture or relief such as the ripple on an orange peel or the texture of a woven fabric.

Modem (Modulator/Demodulator) - A communications device that converts digital information into analog signals suitable for transfer over (analog) telephone lines. It also converts the analog signal from phone lines into digital information.

Moire - Objectionable patterns that appear at regular frequencies when two or more screen patterns are placed over one another. May be caused by misalignment, incorrect screen angles, slipping or slurring.

Mottle - Spotty or speckled printing.

Mount - To fasten the plate or blanket to an offset press.

Mouse - A small, hand-held device used to position the cursor on the computer screen. When the mouse is rolled across its pad or another flat surface, the cursor moves a corresponding distance across the display monitor.

Moveable Type - The individual metal or wooden type characters that are taken from the typeset, arranged to form words and sentences, and then returned to the case for reuse later.



Mullen Tester - A machine for testing the bursting strength of paper.

Multitasking - The ability of a computer to run more than one application at a time.

Nanometer - A unit in which wavelengths of light and other radiant energy are expressed. One nanometer is one-billionth of a meter.

Nanotechnology - In 2012, Benny Landa of the Landa Corporation introduced the nanographic printing press at that year's Drupa exposition in Germany. It was a new digital printing process using very small pigment water-based particles, which combines offset performance with digital versatility. This process uses special inks.

Near Field Communication (NFC) - A communication technology that uses RFID (Radio Frequency Identification) to allow items such as phones, tablets and laptops to share data with other devices similarly equipped with NFC.

Near-Line Archiving - A near-line archive is a mid-way archive containing copies of the content and metadata. Typically, browse mode images and metadata will still be stored in the on-line archive for rapid access whereas content will be stored off-line on a remote server. Full editing capability of near-line archive content is still possible.

Negative - The film image of a completed page from which plates will be burned. The light and dark parts of the image are tonally revised from the original copy.

Network - A computer system that allows several users at remote terminals to exchange data electronically through a common central computer or with a modem over conventional telephone lines.

Network Interface Card (NIC) - The device that links one workstation to another in a network.

Neutral Gray - Any level of gray from white to black with no apparent color cast or hue.

Non-heatset - Web printing process whereby porous paper goes through the press and the ink dries naturally.

Non-image Area - The portion of a lithographic printing plate that is treated to accept water and repel ink when the plate is on the press. Only the ink-receptive areas will print an image.

Non-impact Printing - A printing device that creates letters or images on a substrate without striking it. Large, high-speed and ordinary office photocopiers as well as laser and ink-jet printers are some examples.

Non-reproducible Colors - Certain colors in nature and photography cannot be reproduced using process inks. An example of non-reproducible color is a very dark, deep, rich, wine red.

Object Oriented - An approach in drawing and layout programs that treats graphics as line and arc segments rather than individual dots. Also called vector-oriented.

Oblong - A booklet or catalog bound along the shorter dimension.

Occupational Safety and Health Act (OSHA) - A federal law enacted in 1970 to protect workers from industrial hazards. OSHA inspectors may appear unannounced or at the request of an employee to examine any plant for violations of the safety and health standards set forth by the act.

OEM (Original Equipment Manufacturer) - A

misleading term for a company that has a special relationship with computer producers. OEMs buy computers in bulk and customize them for a particular application. They then sell the customized computer under their own name. The term is really a misnomer because OEMs are not the original manufacturers -- they are the customizers.

Off-press Proof - A color proof that is similar in appearance to the finished printed product but is made without the aid of a printing press.

Offset Printing - Usually refers to offset lithography. The image prints by transferring ink from a flat plate or cylinder to a rubber blanket that deposits the ink onto the substrate instead of directly from plate to paper.

Oleophilic - Oil receptive. See hydrophobic/hydrophilic.

Oleophobic - Oil repellent. See hydrophobic/hydrophilic.

Online - The state of a computer being connected to and communicating with another electronic device for the purpose of distributing or retrieving information.

Online Archiving - Online archives will generally directly record compressed bit streams to avoid the concatenation effects of another compression system. The archive may also be associated with highly compressed browse mode images and metadata to aid recovery of archive content. The quality level of the browse mode images is only required to support picture recognition, with no expectation that these pictures will be used for any other purpose. Metadata and browse mode images will normally be located on the same storage device for rapid access to the content. Full editing capability should be possible with on-line archive content.

One-up - Having only one image of each item (see two-up).

Opacity - Characteristic of paper or other substrate that prevents print on one side from showing through to the other side. Also, the characteristic of ink that prevents the substrate from showing through.

Opaque - To paint out the portions of a negative that are not wanted on the plate.

Open Prepress Interface (OPI) - A set of standardized protocols that allows desktop equipment to be linked with color electronic prepress systems (CEPS). High-resolution color images are stored on a central network server, and low resolution files are used for positioning, scaling, etc. in the page layout program. At output time, the high-resolution images are swapped for the low-resolution images.

Open System - Hardware and software components that are not dependent on any vendor's proprietary architecture.

Operating System - The master program that a computer needs to start up and perform basic tasks. It allows the computer to control itself and perform other functions, such as managing memory allocation for application software and data files.

Optical Centering - Positioning material a little above center when it is desired to make it appear centered with respect to top and bottom.

Optical Character Recognition (OCR) - A technique in which any printed, typed, or handwritten copy or graphic images are scanned by an electronic reader that converts the information into a form that can be read, interpreted, and displayed by computers.

Optical Gain - An effect caused by printing on a rough-surfaced paper in which halftone dots appear larger than actual size, resulting in image degradation.

Orthochromatic - A term applied to photographic materials that are sensitive to green, blue and ultraviolet light.

Outline Halftone - A photo reproduction in which the background around the primary subject has been removed.

Overhang Cover - A cover larger in size than the pages it encloses.

Overlay - A tissue over the base keyline for writing corrections and instructions such as indicating color breaks.

Overlay Proof - Color proof which simulates the appearance of the printed piece. It consists of sheets of film dyed or pigmented with the color and image of each plate to be used in the print run. The film is stacked so it is in register and in the order the inks will be printed.

Overprint - To print over an area that has previously been printed. **Overrun** - Copies printed and/or bound in excess of the specified quantity.

Overrun - Additional copies printed in excess of the specified quantity.

Overs and Unders - Only digital presses can literally print the number of pieces you order. Other presses will print extra copies (overs) or even print fewer than you order (unders). Printers can print 10% more or less than the quantity you specify, and charge you accordingly. Just be aware of this common practice, especially if you are printing a huge run and do NOT want 10% over, or if your quantity is dangerously close to what you need (say, for a mailing), in which case you don't want to risk running out. Know that you can specify what percentage of overs/unders you will accept.

Oxidation - Combining oxygen with the drying oil in a printing ink to promote a slow chemical reaction that produces a dry ink film.

PS - Adobe Systems Postscript isn't an image format, per se - it's a page description language, originally conceived so computers could send very accurate page descriptions to the then new high resolution laser printers. You can save black and white or color pictures as Postscript, but you'll end up with a very large file. Postscript is not a very efficient format, but its advantage is all plain text - you can modify a Postscript file with any text editor, if you know what you're doing.

PSD - Adobe Photoshop's native format, which stores all of its layer and selection and miscellaneous other image data.

Packing - Paper used to underlay the image or impression cylinder in letterpress or the plate or blanket in lithography to get the proper squeeze and pressure for printing.

Page - One side of a leaf in a publication.

Page Buffering - The ability to spool an entire image to disk and print at one time for uninterrupted flow.

Page Layout Software - Computer programs used to assemble type and images into page form.

Page Makeup – (1) The assembly of all elements to make up a page. (2) The electronic assembly of all page elements to compose a complete page with type, graphics, images, and color in place on a display screen for output to plate or printer.

Pagination - Numbering pages in order. Also, the process of performing page makeup on a computer.

Palette - The collection of colors or shades available or used in a project, graphic system or program.

Panchromatic - Film that is sensitive to all colors of light.

Panel - One page of a brochure on one side of the paper. A letter folded sheet has six panels.

Parallel Fold - A folding succession in which all folds are made parallel with each other.

Paste-up - Placing graphics and text in a mechanical either manually or electronically.

PDF (Portable document format) - A computer file format that preserves a printed or electronic document's original layout, type fonts and graphics as one unit for electronic transfer and viewing. The recipient uses compatible "reader" software to access and even print the PDF file.

PDL (Page Description Language) - In digital prepress, a computer language designed for describing how type and graphic elements should be produced by output devices. PostScript is the most commonly used PDL in printing.

Perfect Binding - Signatures that are folded and collated on top of one another, as opposed to saddle-stitch binding in which the signatures are folded inside one another.

Perfecting Press - Press that prints on both sides of the paper during a single pass.

Perforating - Punching a row of small hole or incisions into or through a sheet of paper to permit part of it to be detached; to guide in folding; to allow air to escape from signatures; or to prevent wrinkling when folding heavy papers.

pH - A reference number used for expressing the acidity or alkalinity of solutions. A value of 7 is neutral in a scale ranging from 0 to 14. Solutions with values below 7 are acid. Those above 7 are alkaline.

Photoconductor - In digital imaging, special materials used in electrophotography that are light sensitive when charged by a corona. They then convert light energy (photons) into electrical energy (electrons).

Photopolymer Coating - In photomechanics, a plate coating consisting of compounds that polymerize on exposure to produce tough abrasion-resistant plates capable of long runs especially when baked in an oven after processing.

Photostat - Brand name for an early diffusion transfer process used to make positive paper prints of line copy and halftones.

Phototypesetting - Setting type directly on film or photosensitive paper for reproduction.

Pica - Unit of measure commonly used in typesetting and design. A pica is one-sixth of an inch.

Picking - The lifting of the paper surface during printing, leaving unprinted spots in image areas. This occurs when the pulling force (tack) of the ink is greater than the surface strength of the paper.

Pickup Art - Artwork from a previous job incorporated into a current job.

Pigment - The fine, solid particles used to give color, transparency or opacity to ink.

Piling - The building up or caking of ink on rollers, plates or blankets which will not transfer readily.

Pinholes - Tiny areas that are not covered by ink.

Pixel - Abbreviation for picture element. The separate elements of a bitmapped image on a video monitor.

Pixel Interleave - System of organizing color data within a computer pixel-by-pixel (i.e., a pixel of yellow, a pixel of magenta, a pixel of cyan, a pixel of black, etc.). See also: pixel.

Pixel Swapping - A CEPS technique to exchange pixels from one area of a picture for pixels in another area. Example: a window may be removed from a brick building if one area of the brick wall is placed in that area of the picture. Using this technique, blemishes can be removed and objects can be added to the reproduction.

Pixelization - A technique used to represent areas of complex detail as relatively large square or rectangular blocks of discrete, uniform colors or tones.

Plate - Piece of paper, metal, plastic or rubber carrying an image to be reproduced using a printing press.

Plate Cylinder - In lithography, the cylinder that holds the printing plate tightly and in register on press. It places the plate in contact with the dampening rollers that wet the non-image area and the inking rollers that ink the image area, then transfers the inked image to the blanket, which is held on its own cylinder.

Platemaking - Preparing a printing plate or other image carrier so that it is ready for the press.

Platesetters - A device that images printing plates directly from digital image data; no film or any analog processes are required.

Platform - (1) A computer hardware usually incorporating a specific operating system. (2) The underlying hardware or software for a system.

Plug-and-Play - The ability of a computer to detect and configure a new piece of hardware automatically, without the user having to reconfigure the hardware elements.

PMS (Pantone Matching System) - A set of preprinted color patches used to choose and communicate color so exact matches can be obtained.

Point - Unit of measurement commonly used to specify type sizes. There are 12 points in a pica and 72 points in an inch.

Point-and-Click Access - Use of graphical-user-interface (GUI) software and a mouse to execute computer commands.

Poor Trapping - The press condition in wet printing in letterpress and lithography when less ink transfers to previously printed ink than to unprinted paper. Also called undertrapping.

POP - Point of Presence, terminology for local access to a network or telecom service. Also point of purchase.



Porosity - The property of paper that allows the permeation of air, an important factor in ink penetration.

Port - The connecting point between an electronic device and the equipment that transfers data to the rest of the system.

Position Proof - A color proof that is made to verify that all the elements of the reproduction (text, graphics and pictures) are in the correct position and are in register with each other.

Positive - A reproduction which is exactly like the original.

Post Bind - To bind using a screw and post inserted through a hole in a pile of loose sheets.

Post Consumer Waste (PCW) - A paper or board product that has completed its life cycle as a consumer item and would otherwise have been disposed of as solid waste. Post-consumer materials used in the manufacture of recycled fiber include office paper, cardboard, newspapers and magazines.

PostScript - Adobe Systems, Inc. tradename for a page description language that enables imagesetters and other output devices developed by different companies to interpret electronic files from any number of personal computers ("front ends") and off-the-shelf software programs.

PostScript, encapsulated - A file format used to transfer PostScript™ image information from one program to another.

Postpress - The final stages in the printing process in which printed sheets are transformed into saleable products, including binding, finishing and delivery.

Preflighting - An orderly procedure using a checklist to verify that all components of an electronic file are present and correct prior to submitting the document for high resolution output.

Premakeready - The stage prior to printing in which all production specs are examined, necessary materials are brought to the press, and materials are checked for damage.

Pre-master - To format a data file into the ISO 9660 format (which is the International Standard for CD-ROM), before the mastering process. The data file is then provided to the party responsible for the mastering process (see master).

Prepress - Camera work, color separating, stripping, platemaking and other functions performed by the printer, separator or service bureau prior to the actual printing.

Prepress Proof - Any color proof made using ink jet, toner, dyes or overlays.

Press Check - When a customer is at the printing press as the press begins to print his or her job, in order to approve the job as it is printed. A press check can last a few minutes or several days, depending on the size of the job.

Press Proof - A proof made on press using the ink and paper specified for the job.

Press Run - The actual running of the press to print the job following makeready. Also, the number of copies of a publication printed.

Presswork - All operations performed on or by a printing press that lead to the transfer of inked images from the image carrier to the paper or other substrate.

Price Break - Quantity at which unit cost of paper or printing drops.

Primary Colors - The colorants of a system used to reproduce the colors for the entire reproduction. Cyan, magenta and yellow are subtractive primary colors while red, green and blue are additive primary colors.

Printer Control Language (PCL) - The page description language (PDL) developed by Hewlett Packard and used in many of their laser and ink-jet printers. PCL 5 and later versions support a scalable font technology called Intellifont.

Printer's Devil - A Printer's Devil is a pressman's assistant; an older term referring to the pressman's assistant or helper (sometimes referred to now as a catcher) when a press is being run.

Printer's Spread - Two facing pages in the order they will be printed, e.g. pages 1 and 4 and also 2 and 3 will be keylined together for a four-page brochure.

Print Quality - The degree to which the appearance and other properties of a print job approach the desired result.

Printing - Any process that transfers to paper or another substrate an image from an original such as film, electronic memory, stencil, die or plate.

Printing Plates - A thin metal, plastic or paper sheet that serves as the image carrier in many printing processes.

Printing Unit - The sections on printing presses that house the components for reproducing an image on the substrate. In lithography, a printing unit includes the inking and dampening systems and the plate, blanket and impression cylinders.

Process Camera (also called graphic arts camera) - A camera used to photograph line or halftone copy or to produce color separation negatives for printing on another production process.

Process Colors - The three colors (cyan, magenta and yellow) plus black that are used in full-color printing.

Process Color Separation - A consequence of the offset lithographic process. In order to print full-color images, it is necessary to prepare four separate files for each of the process colors (cyan, magenta, yellow and black). When the colors are overprinted, they combine to render a wide range of color. CMYK produces the widest range of color with the fewest inks when printing.

Process Control - A system using feedback to monitor and manage a certain procedure, input and output data are tabulated according to specific formulas and compared with certain standards and limits; the process is then adjusted as necessary.

Process Inks - The ink colors of cyan, magenta and yellow used to print color reproductions.

Process Photography - (1) Creating line and halftone images for photomechanical reproduction. (2) The equipment, materials and methods used in preparing color-separated printing forms for color reproduction.

Production Automation - Use of a centralized computer to monitor costing, workflow, job status, pressroom efficiency, billing, etc.

Production Color Laser - Dry-toner printing systems that print process colors (CMYK) at high speeds (up to 6,600 sheets per hour) and often combine printing with finishing.

Production Workflow - A sequence of production steps required to produce any printed item.

Program - A systematic series of software instructions designed to direct a computer to perform a specific task.

Progressive Proof - A set of proofs made with ink on paper from the actual plates to show the sequence of printing and the result after each additional color is applied. Also called progs.

Proof - A prototype of an image that is supposed to show how it will appear when printed on the press.

Property Rights - Metadata recording the ownership of Content and the history of ownership may be stored in the wrapper in order to facilitate the establishment and preservation of copyright.

Proprietary Systems - Computer workstations that are custom designed for one specific task such as color correction, dot etching, or page layout. Proprietary systems rely on specific hardware and software components, and they are often not easily linked to modular systems that use off-the-shelf software and hardware components from several different manufacturers.

Proportion Scale - Round device used to calculate percentage that an original image must be reduced or enlarged to yield a specific reproduction size.

Protocol - A set of rules (conventions) that governs format of data and control of information exchange between two communications devices.

pURL (Personalized URLs) – An application that lets you create a separate URL for each person you're targeting - perhaps in a marketing campaign.

QR Code - A quick response code is a 2D barcode that may be decoded using a smart phone with a camera and Internet connectivity. Snapping a picture of the QR code will lead viewers to the poster's website, where they can access additional information and images.

Quadratone - A halftone image created by overprinting four different halftone screens of the same image with different tonal values.

Quads - Refers to the four separated films; cyan, magenta, yellow and black.

Quality Control - The day-to-day operational techniques and activities that are used to fulfill requirements for quality, such as intermediate and final product inspections, testing incoming materials and calibrating instruments used to verify product quality.

Quarternone - Those dot percentages that are near the 25 percent printing dot size.

Quarto - Sheet folded twice, making pages one-fourth the size of the original sheet. A quarto makes an 8-page signature.

Quotation - Price offered by a printer to produce a specific job.

QWERTY - The standard keyboard, named after the first six letters in the upper row.

RAM (Random Access Memory) - Hardware inside your computer that retains memory on a short-term basis. This information is stored temporarily while you're working on it.

RAS SUN Raster Format - The default image format for SUN workstations. Only lightly compressed and so a rather large format, but it supports up to 36 bit images.

RAW - This may be a Photoshop RAW file, which is a PSD file with no identifying header. Or it may be a minimally formatted image data dump.

RTF - Microsoft's Rich Text Format, which is normally used as a well-understood cross-platform word processing document format, but which can store pictures as well as text. The RTF format is used as a source document for Windows Help files and other Microsoft products.



Ragged - Type that is not justified on the right or left side.

Rag Paper - Paper containing a minimum of 25% rag or cotton fiber pulp.

Rainbow™ - 3M's digital, high resolution, thermal dye sublimation, desktop color proofing system.

Rainbow Fountain - Technique of putting ink colors next to each other in the same ink fountain and oscillating the ink rollers to make the colors merge where they touch, producing a rainbow effect.

Random Access - A system of data file management in which a record is accessible independent of its file location or the location of the previous record accessed. In other words, records need not be accessed sequentially.

Random Proof - A color proof consisting of many images ganged on one substrate and randomly positioned with no relation to the final page imposition. This is a cost-effective way to verify the correctness of completed scans prior to further stripping and color correction work. Also called scatter proof.

Raster - An image composed of a set of horizontal scan lines that are formed sequentially by writing each line following the previous line, particularly on a television screen or computer monitor. See also: bitmap.

Raster Image Processor (RIP) - The device that interprets all of the page layout information for the marking engine of the imagesetter or platesetter. PostScript or another page description language serves as an interface between the page layout workstation and the RIP.

Rasterization - The process of converting mathematical and digital information into a series of variable-density pixels.

RC Paper - The photosensitive resin-coated paper generally used to record the output of typesetters and imagesetters.

Read-Only Memory (ROM) - Nonerasable, permanently programmed computer memory. It can be accessed and "read" by the user but it cannot be edited. See also: randomaccess memory.

Reader's Spread - Keylines of two facing pages in correct numerical order, e.g., pages 2 and 3.

Ream - 500 sheets of printing paper. Stacks and skids of paper often include slips of paper (ream markers) marking the division of the stack into reams.

Recovered Fiber - Paper and board collected through commercial, residential, and industrial recycling programs for reuse as a raw material in paper and board manufacture or other products.

Recto Page - The right-hand or odd-numbered page of an open book or spread.

Recycled Paper - New paper made entirely or in part from old paper.

Reflection Copy - Any opaque color artwork submitted for reproduction such as photos, sketches or paintings.

Reflective Copy - Any painting, artwork or photograph (not transparencies) that reflects light off its surface.

Register - The fitting of two or more printing images on the same paper in exact alignment with each other.

Register Marks - Crosses or some other design that are pasted outside your keyline on the board. Everything done to the job through printing must have these marks to prevent the separations, film or plates from being misaligned or out of register.

Registration - The correct positioning of one color over another during the printing process.

Relative Humidity (RH) - The amount of water vapor present in the atmosphere expressed as a percentage of the maximum that could be present at the same temperature.

Relief Printing - Printing method whose image carriers are surfaces with two levels having inked areas higher than non-inked areas. Types include block printing, flexography and letterpress.

Remote proofing - Digital transmission of a proof to a remote office or customer location for output and evaluation at the remote site.

Repeatability - The precision with which a device can position an image, usually measured in microns. For example, a capstan imagesetter has low repeatability compared with a drum imagesetter which is more accurate in its operation.

Reprint - An ad which is printed and then sent to a magazine for insertion. Also refers to a reprint of ads supplied by the publication before the publication is issued.

Reprography – Copying and duplicating.

Resolution - (1) The density of dots or pixels on a page or display usually measured in dots per inch. The higher the resolution, the smoother the appearance of text or graphics. (2) The precision with which an optical, photographic, or photomechanical system can render visual image detail. Resolution is a measure of image sharpness or the performance of an optical system. It is expressed in lines per inch or millimeter.

Reticulation Effect - A wrinkled look created by increasing the viscosity of the coating to a point where it cannot be spread evenly on the paper. The surface semi-rejects the coating film, causing it to bead, leaving a granulated look.

Retouch - To correct flaws in an image or make design changes. Retouching includes correction of mechanical problems, such as removing shadows or dust, as well as alterations to the image. Digital retouching, which makes changes to pixel values to enhance or change the appearance of the image, is typically done on a computer before printing.

Reverse - Type, graphic or illustration produced by printing ink around its outline, thus allowing the underlying color or paper to show through and form the image. The image “reverses out” of the ink color. Also called knock out or liftout.

RGB - Red, green and blue. The additive primaries which are used in video monitors.

Right-angle Fold - A folding succession in which each succeeding fold is made at right angles to the preceding one.

Right Reading - Copy that reads correctly in the language in which it is written. Also describes a photo whose orientation looks like the original image.

RIP (Raster Image Processing) - A hardware and/or software system that translates page description command into bitmaps for output to a laser printer or imagesetter.

River - The apparent white space that is produced when poor or random word spacing is used.

Roller Stripping - A term denoting that the ink does not adhere to the metal ink rollers on a press.

Rosette Pattern - The desirable minute circle of dots that is formed when two or more process color screens are overprinted at their appropriate angle, screen ruling and dot shape.

Rotogravure - A printing process that uses a cylinder as an image carrier. Image areas are etched below nonimage area in the form of tiny sunken cells. The cylinder is immersed in ink, and the excess ink is scraped off by a blade. When the substrate contacts the printing cylinder, ink transfers, forming the image.

Routers - Devices that connect separate networks that use the same physical network standard.

RRED - Right reading, emulsion side down.

Rub - An ink-related printing problem in which dry ink can easily be rubbed off the surface of the printed sheet. Rub is typically caused by inadequate bonding between the ink and paper on which it is printed. It is sometimes possible to salvage a project that suffers from rub by overprinting with a varnish.

Rub Proof - Ink that has reached its maximum dryness and does not mar with normal abrasion.

Rubylith - A red acetate masking film used in stripping to make an opening.

Rule - A straight line of any thickness or a line used as a graphic element to separate or organize copy.

Run Around - Type that is made to fit around a picture of art.

Run of Paper (ROP) - Printing full color in newspaper but using the same paper and press as the balance of the newspaper.

Runnability - Paper properties that affect the ability of the paper to run on the press.

Saddle-sewn - A form of binding that stitches thread through the gutter fold of a publication.

Saddle-stitched - A form of binding that uses staple-shaped wires through the gutter fold; also called saddle-wired.

Safelight - A lamp for use in the darkroom that gives light of a color that will not affect the photographic material within a reasonable time. Different photographic materials require different safelight filters.

Sans Serif Type - Any type style that does not have cross strokes on the ends of the letters.

Scale - Calculate the amount a photo is to be reduced or enlarged.

Scanner - Electronic device used to digitize an image.

Scented Coating (Scratch 'n Sniff) - This technology involved scents microencapsulated in pigments that are added to coating and applied to the sheet. When rubbed, the microcapsules break, releasing the aroma.

Score - To compress paper along a straight line so it folds more easily and accurately.

Screen - Plastic sheets that have cross-hatched lines.

These screens are placed between the camera and the original photo or continuous tones to break the image into dots to create a halftone image.

Screen Angles - Angles at which the halftone screens are placed with relation to one another to avoid undesirable moire pattern. The most common angles are black 45°, magenta 75°, yellow 90° and cyan 105°.

Screen Frequency - The number of rows (lines) and columns of dots per inch or centimeter of a halftone screen.

Screen Printing - Method of printing by using a squeegee to force ink through an assembly of mesh fabric and a stencil.

Screen Ruling - Sometimes confused with resolution, screen ruling is the number of printing dots per millimeter or per inch on the exposed film. The screen ruling is a critical factor in determining the resolution need. The finer the screen ruling, the higher the resolution needs to be, due to the amount of information required to generate the printing dots.

Screen Tint - A halftone screen pattern of all the same size dots that creates an even tone.

Screening - That part of a RIP (Raster Image Processor) that calculates the tonal values of each spot for an output device. The function of a screener is device dependent because it is related to the resolution of the output device.

Sculpted Emboss - Requires a multilevel die that will accept shapes, angles, and edges and then produces a slightly carved effect.

Scum - A film of ink printing in the non-image areas of a plate where it should not print.

SCSI - Small Computer System Interface, allows peripherals to communicate with a computer's operating system. In personal computing, SCSI interfaces have been replaced, for the most part, by Universal Serial Bus (USB). In the enterprise, SCSI is still used in server farms for hard drive controllers.

Search Engines - These engines help Internet surfers target information by keyword or concept.

Secondary Colors - Colors created by combining two primary colorants of a color system. Example: red would be the secondary color produced with magenta and yellow. Also referred to as overprint colors.

Selective Binding - Placing signatures or inserts in magazines and catalogs according to demographic or geographic guidelines.

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

Semi-Chemical Pulp - A combination of chemical and mechanical pulping with properties similar to chemical pulp.

Sensitivity Guide - A continuous-tone gray scale with numbered steps used to control exposures in platemaking and lithfilm photography.

Serif Type - Any type style that has cross strokes on the ends of the letters.

Serigraphics Printing - Printing method whose image carriers are woven fabric, plastic or metal that allows ink to pass through some portions and blocks ink from passing through other portions. Types include screen and mimeograph.

Server - A device on a computer network that allows networked users (clients) access to a specific service on the network. An example is a file server, which allows the users to share data files and application software.

Service Bureau - A business that provides manipulation and output of digital files, usually to a PostScript imagesetter.

Set-off - Ink from a printed sheet rubs off or marks the next sheet as it is being delivered. Also called offset.

Shadow - The darkest areas of an image or photograph; represented as the largest dots in a halftone.

Sharpen - Reducing the size in halftones or separations.

Sheeter - A device on a printing press that converts continuous forms into smaller sheets.

Sheetfed Press - A printing press that feeds and prints on individual sheets of paper (or another substrate), rather than a continuous paper roll or web.

Sheetwise - To print one side of a sheet of paper with one form or plate, then turn the sheet over and print the other side with another form using the same gripper and side guide. This method is used for printing signatures.

Shingling - 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 signature.

Short Ink - An ink that is buttery and does not flow freely.

Show-through - The undesirable condition in which the printing on the reverse side of a sheet can be seen through the sheet under normal lighting conditions.

Shrink Wrap - Using heat to affix a thin plastic material around printed and bound products to prepare them for shipment.

Side Guide - On sheetfed presses, a guide on the feed board to position the sheet sideways as it feeds into the front guides before entering the impression cylinder.

Side Stitch - To bind by stapling through all sheets along one edge.

Signature - A group of pages brought together into proper sequential order and alignment after it has been folded.

Signature Proof - Kodak's proofing system, negative/positive, on most stocks.

Silhouette Halftone - A halftone with all of the background removed.

Silverprint - A proof that is made of the negative film to ensure that all elements are accurate and in correct position before the plate is made.

Simplex - When a sheet is printed on one side only, it's a "simplex," as opposed to duplex, meaning the job prints on both sides.

Simulated Spit Fountain - A way to get a multicolor look using just two inks. This involved putting two colors side-by-side in the same ink fountain on press and printing them off the same plate. The ink colors on the outer edges stay distinct but blend into a third color in the center where they meet. A simulated split fountain can achieve the same look as a split fountain, but allows for consistency from sheet to sheet and doesn't require constant washup of the cylinders to keep the inks from getting too muddy.

Sizing - Treatment of paper which gives it resistance to the penetration of liquids (particularly water) or vapors.

Skid (Pallet) - Wooden platform that supports piles of paper during shipping and storage. Skids usually accommodate from 2500 to 4000 pounds of paper.

Slit - To cut printed sheets or webs into two or more sections by means of cutting wheels on a press or folder.

Slow Drying - Smudging or smearing on the printed surface, caused by the failure of the ink to dry within the specified time. Possible causes include not enough drier in the ink, overly acidic stock, or excess humidity in the stock or the pressroom.

Slur - A smearing of ink that occurs in printing when there isn't enough pressure on the blanket.

SMTP - The language computers must speak to send and receive email on the Internet.

Smartphone - A mobile phone that offers advanced capabilities for computing and connectivity in a small, lightweight device, including Web surfing, text messaging and email, image scanning, high-resolution photography and video, among other functions.

SNAP (Specifications for Nonheatset Advertising Printing) - A set of standards for color separations and proofing developed for those printing with uncoated paper and newsprint stock in the United States.

SONET (Synchronous Optical Network) - Fiber-optic transmission system for high-speed digital traffic. Employed by telephone companies and common carriers.

Social Media - A broad term for various Web-based means for connecting individual users with other users, sharing views and conveying information. Businesses are increasingly using social media to increase the effectiveness of traditional marketing media by helping them understand, learn from and communicate with consumers and potential customers.

Soft Dot - Halftone dot with a weak fringe density or halo surrounding a solid core.

Soft Ink - Descriptive of the consistency of paste inks.

Soft Proof - A proof that is viewed on a color-calibrated video monitor as opposed to a hard proof printed on paper.

Soft Touch Coating - This special effects coating imparts a unique rubbery to suede-like feel with a matte appearance. It can be applied inline through the coating tower and does not require any secondary or offline treatment.

Software - The stored instructions (programs) that initiate the various functions of a computer (the hardware). Instructions may be written in machine language or in another programming language, then compiled, interpreted, or assembled into machine language. Word processing, page layout, and drawing programs are a few of the software programs used in the graphic arts. There are also other more specialized software programs that control high-end color electronic prepress systems and even some presswork applications.

Solid - Any area of the sheet receiving 100 percent ink coverage.

Solvent - A component of the vehicle in printing inks that disperses the pigment and keeps the solid binder liquid enough for use in the printing process.

Spam - Electronic junk mail.

Specs - Complete and precise written description (or specifications) of features of a printing job such as type size and leading, paper grade and quantity, printing quality or binding method.

Spectrophotometer - Instrument for measuring color for CIE color spaces. It is more accurate than most color colorimeters.

Spectrum - The series of color bands formed when a ray of light is dispersed by refraction; the rainbow-like band of colors resulting when a ray of white light is passed through a prism.

Spectrum Silver Foil - This is a foil that contains pigments that change color when moved in the light.

Splice - The area where two paper rolls are joined to form one continuous roll.

Spider (Crawler)(Robot)(Bot) - Search engine technology. A simple program that scans the Web, crawling from link to link in search of new sites and recording the URL's.

Spine - The back of a bound book connecting the two covers. Also called backbone.

Spiral Bind - To bind using a spiral of continuous wire or plastic looped through holes. Also called coil bind.

Splash - A "first", "front" or "jump" page that you often see on some Web sites usually containing a "click-through" logo or message or automatically goes away by itself.

Split Run - Different images, such as advertisements, printed or bound in different editions of a publication. Also, two or more binding methods used on the same print run.

Spooler - A device by which a computer can store data and feed it gradually to an external device, such as a printer, which is operating more slowly than the computer.

Spot Color - Individual color or colors that are utilized to highlight illustrations or type. Spot color is frequently printed with non-process color inks, although process inks can be used. Can be used for exact color match, as in a corporate logo.

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

Spread - Two facing pages. They can be a reader's spread or a printer's spread.

Square Halftone - A halftone that has four right-angle corners.

Stamping - Using a die and often colored foil or gold leaf to press a design into a book cover, a sheet of paper or another substrate. The die may be used alone (in blank stamping) if no color or other ornamentation is necessary. Special presses fitted with heating devices can stamp designs into book covers.

Standard Viewing Condition - An area surrounded by a neutral gray and illuminated by a light source of 5000K both for viewing transparencies and reflection prints. Large format transparencies should be surrounded by approximately 2-4 inches or 5-10 centimeters of white surround and should not be viewed with a dark surround.

Star Target - Film pinwheel used to measure resolution of plates during production and degradation during printing.

Stat - Short for photostat, a photographic print of line copy or halftones.

Static Neutralizer - A device on a printing press designed to remove static from the paper and avoid ink set-off and trouble with feeding the paper.

Statistical Process Control (SPC) - Method of understanding and managing production processes by collecting numerical data about each step in the process and all materials used in the production sequence, including output; this data is then analyzed to locate causes of variations.

Step-and-repeat - The procedure of exposing an image repeatedly in different places on the printing plate.

Stet - A proofreader's mark, written in the margin, signifying that copy marked for correction should remain as it was.

Stochastic Screening - A digital screening process that converts images into very small dots (14-40 microns) of equal size and variable spacing.

Stock - The paper or other substrate to be printed.

Streaming – (1) Web technologies that let viewers hear and see audio and video data as it arrives, rather than waiting for an entire file to download. (2) To transmit.

Strip - To assemble images on film for platemaking. Stripping involves correcting flaws in film, assembling pieces of film into flats and ensuring that film and flats register correctly.

Stripping - The process of manually creating composite films and fully imposed flats for platemaking. Most of this work is now done electronically, bypassing the traditional artisan.

Substance - The weight in pounds of a ream (500 sheets) of paper cut to the standard size (17" x 22") for business papers (bond and ledger): e.g., 20 pounds. Similar to basis weight of other grades of paper.

Substrate - Any surface on which printing is done.

Subtractive Color System - A means of producing a color reproduction or image with combinations of yellow, magenta and cyan colorants, which serve as filters to "remove" colors from a white substrate.

Sulphate Pulp (Kraft) - Paper pulp made from wood chips cooked under pressure in a solution of caustic soda (sodium hydroxide) and sodium sulphide.

Sulphite Pulp - Paper pulp made from wood chips cooked under pressure in a solution of bisulphite of lime (calcium bisulphite).

Supercalender - A finishing device consisting of alternate metal and resilient rollers used to produce a smooth, thin sheet of paper.

Surprint - In photomechanics, exposure from a second negative or flat superimposed on an exposed image of a previous -negative or flat.

Switch Coating - A UV-based coating that provides an iridescent color transformation effect when applied onto a substrate. Microparticles suspended in the coating refract light, allowing the coating to change from one color to another.

System - The combination or configuration of software and hardware components, consoles, peripherals, and connections necessary to perform specific processing operations electronically.

System Architecture - The particular configuration in which computer hardware is connected to various other components so that it fulfills its primary purpose.

Swatch - A small, printed solid used for color matching or measurement. It represents what an ink color might look like after it is printed.

SWOP (Specifications for WebOffset Publications) - A set of specifications for color separation films and color proofing to insure the consistency of the printed color.

TIFF/TIF (Tag Image File Format) - A bitmapped graphics file format. TIFF handles monochrome, gray scale, 8-and 24-bit color. Widely used in book publishing and other print-related industries, TIFF allows for customization, and TIFF files retain their layers and transparency when saved in Photoshop. Over the years, several versions of TIFF have been created, which does not guarantee compatibility between all programs.

T1/T3 - AT&T specifications for high-bandwidth, leased digital transmission. Unlike switched lines in which the printer pays just for the time required to complete a transmission, T1 and T3 lines are dedicated to continuous data transfer and thus more costly. Data rates are 1.544 Mbps for T1 and 44.21 Mbps for T3. A fractional T1 line has its bandwidth partitioned into smaller channels for point-to-point communications.

Tack - The amount of stickiness in printing inks that makes them adhere to the substrate while minimizing dot gain. Too much tack can cause surface picking.

TCP/IP (Transmission Control Protocol/Internet Protocol) - Is the international language of the Internet. This set of protocols makes e-mail and other services possible among computers that don't belong to the same network.

Tear Sheet - Actual ad removed from a publication and sent to the advertiser, often with the invoice.

Terabyte (Tb or TB) - Equal to approximately one billion kilobytes and often used to measure optical disk storage capacity.

Terminal - A peripheral computer system device, consisting of a monitor and keyboard. It is usually connected to the mainframe through some sort of network.

Terms and Conditions - This is metadata that describes the "rules" for use of an object. Terms and conditions might include an access list of who can view the object, a "conditions of use" statement that might be displayed before access to the object is allowed, a schedule (tariff) of prices and fees for use of the object, or a definition of permitted uses of an object (viewing, printing, copying, etc.).

Text - The body matter of a page or book as distinguished from the heading and art.

Text Processing - Computer systems, stand-alone devices, and application software products that are used to enter, modify, rearrange, format, display, and print out text.

Thermal Dye Sublimation - Like thermal printers, except pigments are vaporized and float to desired proofing stock. Similar to Thermal Dye Diffusion Transfer, or D2T2.

Thermal Transfer Printer - These printers use a transfer sheet that carries ink and is placed in contact with the paper or plastic transparency, and a heated printhead driven by digital data touches the transfer sheet to transfer images to the right positions on the page.

Thermo-mechanical Pulp - In papermaking, made by steaming wood chips prior to and during refining, producing a higher yield and stronger pulp than regular groundwood.

Thermochromatic Coating - A reaction caused by dyes that are heat sensitive. The heat from a finger will cause the color to change.

Thermography - Method of printing using colorless resin powder that takes on the color of underlying ink.

Thumbnail Sketch - Crude, small layouts sketched in pencil to develop the initial concept for a design.

Tile - A method used when a page is too large to be output in its entirety by the output device. The page is divided into pieces that allow for overlap so that it can be reassembled as a whole.

Tint - A solid color reduced either by screening or by adding white ink. Also, a halftone of a specified dot percentage, but less than 100%.

Tissue Overlay - A thin, translucent paper placed over artwork (mostly mechanicals) for protection and used to indicate color breaks and corrections.

Tolerances - The specification of acceptable variations in register, density, dot size, plate or paper thickness, concentration of chemicals, and other printing parameters.

Tonal Compression - The reduction of an original's tonal range to a tonal range achievable through the reproduction process.

Tonal Range - The difference between the brightest and the darkest tone in a photograph or offset lithographic print.

Tone - The character of a color, its quality or lightness.

Toner - In digital printing, imaging material also called digital inks, used in plateless printing systems such as electrophotography, magnetography, ion or electron deposition, and laser printers. Toner must hold or conduct an electrical charge. In inks, dye used to tone printing inks, especially black.

Toolbar - Onscreen bar that displays various icons or formatting choices.

Tooth - A characteristic of paper, a slightly rough finish, which permits it to take ink readily.

Total Quality Management (TQM) - A management approach to long-term success through customer satisfaction; TQM is based on the participation of all members of an organization to continuously improve processes, products, services and the company culture.

Touch Plate - A means to add extra color to select areas of an image. A touch plate consists of a plate of special match color outside the traditional cyan, magenta and yellow. It often enhances colors that cannot be created in four-color separations alone.



Trade Printers - Printers who serve other printers, not the general public (as in "we print for the trade).

Trade Shop - Service bureau, printer or bindery working primarily for other graphic arts professionals, not for the general public.

Traditional Color Angles - The screen angles used most often in color separation, considered to be optimal for reducing moire patterns-yellow at 0°, cyan at 15°, black at 45° and magenta at 75°.

Transparency - Positive photographic image on film allowing light to pass through.

Transparent Ink - A printing ink which does not conceal the color beneath. Process inks are transparent so that they will blend to form other colors.

Trapping - A method of overlapping adjoining colors or inks that helps minimize the possibility of a fine white line appearing between two colors, caused by misregistration of color negatives. Also, the ability to print a wet ink film over previously printed ink.

Trim - To cut the excess paper from the edges of a publication after it has been printed and bound.

Trim Marks - Marks on the outside of a keyline to indicate where the piece is to be cut.

Two-up - Having two images of each item (see one-up).

Type 1 - A format for storing digital typefaces developed by Adobe Systems. The most popular typeface format for PostScript printers.

Typesetting - Composing type into words and lines in accordance with the manuscript and typographic specifications.

Typography - The art and craft of creating and/or setting type professionally.

Uncoated Paper - Paper that has not been coated with clay.

Undercolor Addition (UCA) - A technique used to add cyan, magenta and yellow printing dots in dark neutral areas of the reproduction to give them more density.

Undercolor Removal (UCR) - The technique of reducing the cyan, magenta and yellow content in neutral areas of the reproduction and replacing them with black ink so the reproduction will appear normal but will use less ink.

Uniform Resource Locator (URL) - The Web address of a company, service, or other information resource.

Unit - One inking, plate and impression station on a press. A four-color press has four units.

UNIX - The computer environment in which the Internet has been and continues to be developed. It is used to run powerful workstations and networks where multitasking and multiuser access is essential. UNIX is also the parent operating system of DOS, which, in turn, spawned the Windows operating systems prevalent on PCs today.

Up - In printing, two-up, three-up, etc., refers to imposition of material to be printed on a larger size sheet to take advantage of full press capacity.

UV Coating - Liquid applied to a printed sheet, then bonded and cured with ultraviolet light.

UV Inks - Solventless inks that are cured by UV radiation.

Vacuum Frame - A device that holds film or plates in place by withdrawing air through small holes in a rubber supporting surface.

Value - The degree in a color or gray that varies from light to dark.

Variable Data Printing (VDP) (Variable Input Printing) (VIP) - Digital printing technology that enables elements such as text, graphics, charts and graphs, and imagery to be changed from one printed piece to the next without slowing or stopping the press. Leverages data on recipients, enabling mass customization to each individual or household in large runs, as opposed to mass-production of one version.

Varnish - A thin, protective liquid coating applied to the printed sheet for protection or appearance.

Vector - Mathematical descriptions of images and their placement.

Vehicle - The liquid component of a printing ink.

Vellum Finish - A toothy finish that is relatively absorbent for fast ink penetration.

Velox - This is the brand name for a screened print of a photo which is pasted on the keyline; thus showing exactly how it will look when printed.

Versioning - A type of variable data printing that prepares different versions of a promotion for different audiences, different market areas or other segments of the overall market.

Verso Page - The left-hand or even-numbered page of an open book or spread.

Vignette - An illustration in which the background fades gradually away until it blends into the unprinted paper.

Virgin Paper - Paper made exclusively of new pulp from trees or cotton. No recycled materials are included.

Viscosity - A broad term encompassing the properties of tack and flow.

VOC (Volatile Organic Compound) - Volatile organic compounds are emitted as gases from certain solids or liquids and include a variety of chemicals, some of which may have short- and long-term adverse health effects and are a precursor to ground-level ozone formation.

WAN - Two or more related LANs that are linked across a great distance, such as one state to another.

WMF - Windows Metafile format, which is an intermediate vector format for Windows programs to use when interchanging data and, generally speaking, should never be seen anywhere else.

WORM - An optical digital storage medium useful for archiving purposes. It receives and stores information permanently on the disk. While, it cannot be erased or altered it can be "read back" many times.

WPG - WordPerfect metafile format, used by WordPerfect software on various platforms. It supports bitmapped, vector and Encapsulated Postscript data.

WYSIWYG (What You See Is What You Get) - Computer screen displays that approximate the true size and true shape of typographic characters, rules, tints, and graphics.

WYSIWYP (What You See Is What You Print) -

Pronounced wizzy-whip, refers to the ability of a computer system to print colors exactly as they appear on a monitor. WYSIWYP printing requires a special program, called a color management system (CMS) to calibrate the monitor and printer.

Washup - The process of cleaning the rollers, form or plate and fountain of a press with solvents to remove ink as required after a day's run, or during a run for ink color changes.

Waste - A term for planned spoilage, such as the paper trimmed from a sheet to create bleed.

Waterless Lithography Sheetfed - Water-free offset lithographic capability on a sheetfed press that allows ultrafine reproduction and improved, almost continuous-looking halftones.

Waterless Lithography Web - Water-free offset lithographic capability on a web press that allows ultrafine reproduction and improved, almost continuous-looking, halftones.

Watermark - Translucent logo in paper created during manufacture by slight embossing while paper is still approximately 90 percent water.

Web - A roll of paper used in web or rotary printing.

Web Press - A printing press that prints on paper from a continuous roll and outputs it onto another roll, as a folded signature or as cut sheets.

Web Printing - Web printing refers to work produced on large presses that use rolls (webs) of paper, as opposed to paper that's cut into sheets. Web printing is suitable for very large quantities and/or very long runs.

White Space - The areas in print publications that do not carry any type or images—the unprinted surface of the paper.

Whois - A command to find the who behind the .com, .org, or .net. the whois program lets you access a database of registered domain names.

Widow - A single word or part of a word on a line by itself, ending a paragraph, or starting a page, frowned upon in good typography. Sometimes called an orphan.

Wire Side - The side of a sheet next to the wire in manufacturing; opposite from felt or top side.

Wire-o Binding - A continuous double series of wire loops run through punched slots along the binding side of a booklet.

With the Grain - Folding or feeding paper into a press with the grain of the paper parallel to the blade of the folder or the axis of the impression cylinder.

Word Processor - A personal computer and special software program or dedicated electronic equipment used to create, store, retrieve and edit text.

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.

Worm - Known primarily as a virus, a worm is a computer program that can replicate itself. It is also referred to as a program used by search engines to locate and index information on the Web.

Wove Paper - Paper having a uniform unlined surface and a soft smooth finish.



Wrinkles – (1) Creases in paper occurring during printing. (2) In inks, the uneven surface formed during drying.

Wrong Reading - An image that is backwards when compared to the original.

XML (eXtensible Markup Language) - The most widely used semi-structured format for data, introduced by the W3C in 1998. XML files contain only tags and text similar to HTML. However, whereas HTML defines how elements are displayed and printed, XML assigns meaning to the elements. HTML uses predefined tags, but XML requires the developer of the content to define most of the tags.

Xerography - An electrostatic nonimpact printing process in which heat fuses dry ink toner particles in electrically charged areas of the substrate, forming a permanent image. The charged areas of the substrate appear dark on the reproduction, while uncharged areas remain white.

Yellow - One of the three subtractive primary colors used in process printing.

Yield - Number of final size pieces you can get from a parent size sheet.

Zoom - An electronic function that increases or reduces the magnification of the image displayed on the video screen.