GLOSSARY OF FLEXOGRAPHIC PRINTING TERMS

AA: Authors Alterations, changes other than corrections, made by a client after the proofing process has begun. AA's are usually charged to a client as billable time.

Abrasion: Process of wearing away the surface of a material by friction.

Abrasion marks: Marks on a photographic print or film appearing as streaks or scratches, caused by the condition of the developer. Can be partially removed by swabbing with alcohol.

Abrasion resistance: Ability to withstand the effects of repeated rubbing and scuffing. Also called scuff or rub resistance.

Abrasion test: A test designed to determine the ability to withstand the effects of rubbing and scuffing.

Abrasiveness: That property of a substance that causes it to wear or scratch other surfaces.

Absorption: In paper, the property which causes it to take up liquids or vapors in contact with it. In optics, the partial suppression of light through a transparent or translucent material.

Acceptance sampling or inspection: The evaluation of a definite lot of material or product that is already in existence to determine its acceptability within quality standards.

Accelerate: In flexographic printing, as by the addition of a faster drying solvent or by increasing the temperature or volume of hot air applied to the printed surface. Electrical - To speed rewind shafts during flying splices, and in taking up web slackness.

Accordion Fold: Bindery term, two or more parallel folds which open like an accordion.

Acetone: A very active solvent used in packaging gravure inks; the fastest drying solvent in the ketone family.

Activator: A chemistry used on exposed photographic paper or film emulsion to develop the image.

Additive primaries: In color reproduction, red, green and blue. When lights of these colors are added together, they produce the sensation of white light.

Adhesion: 1) The sticking together of any two materials, e.g., adhesion of ink to paper or film. 2) The attractive force that exists between an electrodeposit and its substrate that can be measured as the force required to separate the two.

Adsorb: To attract and hold molecules on a surface, e.g. solvent molecules in a solvent recovery adsorption bed.

After-tack: Tack that develops after ink has apparently dried or after a heat-drying operation.

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

Age resistance: Shelf life. The resistance to deterioration by oxygen and ozone in the air, by heat and light, or by internal chemical action.

Age stability: A test to determine whether an ink formulation can withstand a specific temperature for a specified period without change.

Agglomeration: A cluster of undispersed particles.

Alcohol: A series of organic compounds characterized by the presence of the hydroxyl group; volatile solvents, the most common being ethyl alcohol.

Aliphatic solvents: Saturated hydrocarbon solvents derived from petroleum, such as hexane, heptane and VM&P naphtha, used primarily in A-type gravure inks, or as diluents for other inks and coatings.

Alkaline paper: Paper made with a synthetic alkaline size and an alkaline filter like calcium carbonate which gives the paper over four times the life (200 years) of acid sized papers (40-50 years).

Alkali resistance: Property of an ink, coating or substrate so that it resists film breakdown, color change or color bleed when printed material is subjected to contact with alkaline materials such as soap or detergent.

Alteration: Change in copy of specifications after production has begun.

Alumina hydrate: Also known as hydrate. A white, inorganic pigment used as an extender in inks and noted for its transparency.

Aluminum coating: A coating composed of aluminum paste or powder and a mixing varnish or vehicle.

AM (Amplitude Modulation): Halftone screening, as opposed to FM screening, has dots of variable size with equal spacing between dot centers (see halftone).

Analog color proof: Off-press color proof made from separation films.

Anchor coat: A coating applied to the surface of a substrate to effect or increase the adhesion of subsequent coatings.

Anchoring: In flexographic printing, term describing process of bonding or fusing inks to the substrate.

Angle of wipe: In gravure and flexographic printing, the angle the doctor blade is set from the centerline of cylinder, before loading. Also called *Set Angle*.

Aniline dyes: Derivatives of coal tar classified by chemical composition. Basic dyes have extreme brightness, but are not fast to light, while acid dyes are less brilliant, but are faster to light.

Aniline printing: Early name for rubber plate printing, using fast-drying fluid inks, now obsolete.

Anilox inking: In flexography, two roll inking system with smooth fountain roll that transfers inks to an etched metal or ceramic coated metal roll with cells of fixed size and depth that transfer the ink to the plate. Also used in keyless offset.

Anilox roll: Mechanically engraved steel and chrome coated metering roll used in flexo presses to meter a controlled film of ink from the contacting elastomer covered fountain roller to the printing plates which print the web. Volume of ink is affected by the cell count per linear inch and dimension of the cell and cell wall of the engraving. Manufactured from copper and chromium plated steel. Also given a coating of aluminum oxide (ceramic) or copper and chrome.

Anilox system: The inking system commonly employed in flexographic presses consisting of an elastomer covered fountain roller running in the ink pan, adjustable against a contacting engraved metering roll, the two as a unit adjustable to the printing plate roll, design roll, or plain elastomer coating roll as the case may be. Ink is flooded into the engraved cells of the metering roll, excess 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.

Antifoaming agent: An additive used in ink that prevents or eliminates foaming of a liquid or breaks

foam already formed.

Anti-halation backing: In photography, coating applied to back of film to prevent halation.

Anti-offset or set off spray: In printing, dry spray of finely powdered starch used on press to prevent wet ink from transferring from the top of one sheet to the bottom of the next sheet.

Anti-skid varnish: A generally clear resin coating formulated and applied to large flexible packaging to retard slippage during stacking and handling.

Antique finish: A term describing the surface, usually on book and cover papers, that has a natural rough finish.

Aperture: In photography, lens opening or lens stop expressed as a f/no., such as f/22.

Apochromatic: In photography, color corrected lenses which focus the three colors, blue, green and red, in the same plane.

Applicator roll: Coating; print roll, tint roll, lacquer or varnish roll.

Aquatint: An early plate engraving method that created tonal variation by etching through granular material with varying concentrations of etchant. Used only for fine art engraving.

Art: All illustration copy used in preparing a job for printing.

Artboard: Alternate term for mechanical art.

Art director: The individual responsible for overseeing the creative and production process and managing other creative individuals.

Ascender: That part of a lower case letter that rises above the main body, as in "b".

Asphaltum (Asphalt): A dark colored resinous substance soluble in hydrocarbon solvents. Used as a moisture barrier in heavy laminations.

Author's Corrections: Also known as "AC's". Changed and additions in copy after it has been typeset.

Automatic processor: In photography, machine to automatically develop, fix, wash, and dry exposed photographic film. In plate making, machine to develop, rinse, gum and dry printing plates.

Backlash: Lost motion.

Alt: Looseness in the teeth of a gear mechanism, permitting movement of one or more gears without corresponding movement in the connected mechanisms.

Back Printing: Printing on the underside of a transparent film. Also called reverse printing.

Back up: Printing the second side of a sheet already printed on one side.

Back up roll: See impression cylinder.

Backbone: The back of a bound book connecting the two covers; also called the spine.

Bad break: In composition, starting a page or ending a paragraph with a single word, or widow.

Banding: Method of packaging printed pieces of paper using rubber or paper bands.

Bare cylinder diameter: The diameter of the actual plate cylinder, before the stickyback and plates are mounted.

Base: Often used in referring to a full strength ink or toner. Generally refers to the major ingredient used in a clear lacquer, varnish or ink. May refer to either the solvent or binder system. A cylinder before it is engraved. Base film before addition of coating.

Base ink: A single-pigmented ink with high pigment-to-binder ratio, used in packaging applications for blending.

Basic size: In inches 25 X 38 for book papers, 20 X 26 for cover papers, 22.5 x 28.5 or 22.5 X 35 for bristols, 25.5 X 30.5 for index.

Basis metal: The material upon which coatings are deposited.

Basis weight: The weight in pounds of (except wrapping tissue which is 480 sheets) paper of the basic size for the grade. The standard, or basic, size ream varies with different grades of paper according to trade practices. Some papers and boards are made to a certain caliper, or thickness, rather than to a specific weight. Some examples are: Blanks, Heavy Cover, Tough Check, Stencil Board, Pattern, and Template Papers.

Bearers: In presses, the flat surfaces or rings at the ends of cylinders that come in contact with each other during printing and serve as a basis for determining packing thickness.

Beater: A large mixer in which the pulp for paper is mixed.

Beater Dyed: A paper, the pulp for which is colored in the beater.

Ben day: A system of dots or patterns used by the engraver to effect shading.

Bevel: Angle, ground, honed, or filed on edge of doctor blade.

Bezier curve: The description of a character or symbol or graphic by its outline used by drawing programs to define shades.

Bind: To fasten sheets or signatures with wire, thread, glue, or by other means.
Binding: The process of attaching loose sheets of paper into a book or other multi-page document.

Binder: In ink, the adhesive component, or components, of an ink, normally supplied by the resin formulation.
Alt: Provide body to dyes and inks and act as fixing agents.

Binders: Paper additives which bond paper fibers together, increasing hardness and stiffness of the paper, and reducing linting, picking and dust. Typical binders are starch, gums, and methyl cellulose.

Bindery: The finishing department of a print shop or firm specializing in finishing printed products.

Bit: In computers, the basic unit of digital information; contraction of Binary Digital.

Bit map: In computer imaging, the electronic representation of a page, indicating the position of every possible spot (zero or one).

Blade coating: In gravure and flexography, the predominant method of applying coatings to paper, in which an excess of coating is applied to a cylinder and then wiped off with a blade; the excess coating is returned to a reservoir for re-use.

Blade extension: In gravure and flexography, the amount the back-up and doctor blades extend beyond the holder, 3/8 to 1/2 inches.

Black-and-White: Originals or reproductions in single color, as distinguished by multicolor.

Black printer: In color reproduction, the black plate, made to increase contrast of dark tones and make them neutral.

Bleach test: A method of measuring tinctorial strength of an ink, or toner, by blending it with an opaque white ink of the same kind, then evaluating the tinting strength of the ink versus a control standard.

Bleaching: In papermaking, the introduction of chemical agents such as chlorides or peroxides into pulp to increase its brightness, and, in some pulps, to remove undesirable impurities.

Bleed: Printing that goes to the edge of the sheet after trimming.
Alt: An extra amount of printed image that extends beyond the trim edge of the sheet or page.

Blind embossing: An image pressed into a sheet without oil or foil.
Alt: A design that is stamped without metallic leaf or ink, give a base-relief effect.

Blister: Small raised area, caused by expansion as of trapped gas or fluid beneath the surface.

Blocking: In web printing activities, the sticking together of the top and bottom surfaces of the printed material when they are in contact with the rewind or stock.

Blowup: A photographic enlargement.

Blueline: A blue photographic proof used to check position of all image elements.
Alt: A printer's proof, actually blue on white paper. All AA's and corrections should have been made prior to seeing a blueline.

Blushing: A milky, foggy, or flat appearance in an ink or coating due to precipitation or incompatibility of one of the ingredients. Most often caused by excessive moisture condensation.
Alt: A print defect consisting of a hazy appearance, encountered in foil printing, and caused by moisture trapped between the ink film and the surface of the substrate.

BMP: A computer graphics format not generally used in professional printing.

Board: Alternate term for mechanical.
Alt: A heavy weight, thick sheet of paper or other fiber substance, usually of a thickness of 0.006" or over. The distinction between board and paper is not definite.

Body: In ink making, a term referring to the viscosity, or consistency, of an ink (e.g., an ink with too much body is stiff).

Body type: A type used for the main part or text of a printed piece, as distinguished from the heading.

Bold-face type: A name given to type that is heavier than the text type with which it is used.

Bond & Carbon: Business form with paper and carbon paper.

Bond Paper: Strong durable paper grade used for letterheads and business forms.
Alt: A grade of writing or printing paper where strength, durability and permanence 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 papers. The basic size is 25 X 38.

Bounce: The abnormal reaction to compression, which results in erratic rotational movement of the cylinders, causing missed or imperfect impressions.

Boxboard: Paperboard of sufficient caliper and test to be used in the manufacture of paperboard boxes. Commonly used grades are: news, filled news, chip, straw, jute, patent coated, clay coated. Specifications for boxboard are designated by kink, finish, caliper, dimensions, regular number (for standard sizes 25 X 40 inch sheets) and count (for odd sized sheets).

Brass mounted plates: Printing plates which are pre-mounted onto thin gauge brass, ready for the plate cylinder, to which they are attached by one of a variety of clamping methods.

Break for color: Also known as a color break. In artwork and composition, to separate mechanically or by software the parts to be printed in different colors.

Break-out (Blade edge): in gravure and flexography, a piece of doctor blade material which releases itself from the blade, causing a streak. See *burr*.

Breaking strength: A measure of the strength of paper, films, etc.

Brightness: In photography, light reflected by the copy. In paper, the brilliance or reflectance of paper.

Brochure: A pamphlet bound in booklet form.

Broke: Printed or unprinted paper or paperboard resulting from trimmings or make-ready sheets, generally reusable in paper-making.

Bronze: metallic sheen characteristic of some printed ink in which the appearance of the print depends on the angles of viewing and illumination.

Bronzing: Printing with a sizing ink, then applying bronze powder while still wet to produce a metallic lustre.

Bulk: Thickness of paper stock in thousandths of an inch. In book printing, the number of pages per inch.

Bulk pack: Boxing printed product without wrapping or banding.

Bump exposure: In photography, an exposure in halftone photography, especially with contact screens, in which the screen is removed for a short time. It increases highlight contrast and drops out the dots in the whites.

Buna-N: A synthetic rubber made from butadiene and acrylonitrile, used in the manufacture of flexo plates and rolls. Resistant to aliphatic hydrocarbons, alcohols, cellosolve, and water. Not resistant to aromatic hydrocarbons and esters (acetate), etc.

Burn: In plate making, a common term used for a plate exposure.
Exposing a printing plate to high intensity light or placing an image on a printing plate by light.
Burning a negative or Burning a printing plate.

Bursting strength: Resistance of paper to rupture under pressure, as indicated in pounds per square inch on a Mullen tester.

Burr: In gravure and flexography, a wire-like sliver formed by blade wear.

Butt: Joining images without overlapping

Butt fit: Printed colors that overlap one row of dots so they appear to butt.

Butt register: Printing two or more colors that exactly meet without any provision for color overlap.

Butt splice: An end to end joining of two similar materials. For continuity of surface, design, etc. Often used in joining stickyback, printing plates and webs of substrate in process such as heavy papers and boards at the unwind or rewind where the thickness or the substrate prohibits use of a lap (overlap) splice.

Byte: In computers, a unit of digital information, equivalent to one character or 8 to 32 bits.

CAD/CAM: Acronym for Computer Assisted Design/Computer Assisted Makeup or Manufacturing.

Caking: The collecting of dried ink upon rollers and plates.

Carbonless: Pressure sensitive writing paper that does not use carbon.

Calendar: The equipment used in Heat Transfer Printing through which designs are vaporized from the transfer paper into the fabric.

Calendar rolls: A set or stack of horizontal cast-iron rolls at the end of a paper machine. The paper is passed between the rolls to increase the smoothness and gloss of its surface.

Calendar stack: A group of rolls through which material is passed to reduce thickness, increase density and improve surface smoothness and gloss.

Caliper: Paper thickness in thousands of an inch.

Camera ready: Type and/or artwork that has been pasted into position to be photographed for plate ready film.

Alt: Copy that is ready for photography.

Camera-ready copy: Print ready mechanical art.

Capillary action: A phenomenon associated with surface tension and angle of contact. That force which transfers inks and coatings from engraved cells to a contacting surface as from an anilox roll. Also the rise of liquids in capillary tubes and the action of blotting paper and wicks are examples of capillary action or capillarity.

Caps and small caps: Two sizes of capital letters made in one size of type, commonly used in most roman typefaces.

Carbon black: An intensely black, finely divided pigment obtained by burning natural gas or oil with a restricted air supply.

Carbon tissue: Light sensitive material attached to gravure cylinders and used as a resist in the chemical etching process consisting of layers of gelatin, dye, photosensitive material, and a paper or plastic backing. Exposed to a screen and a continuous tone image, carbon tissue permits the etching of cells of variable depth according to the degree of exposure in each cell area. Until the advent of electronic engraving, the predominant method of imaging a cylinder.

Carload: A truckload of paper weighing 40000 pounds.

Case bind: In bookbinding, a type of binding used in making hard cover books using glue.

Casein: A protein usually obtained from milk. Used to make sizings, adhesive solutions, and coatings. Used as a binder for aqueous dispersions of pigments for a variety of trades.

Cast coated: Coated paper with a high gloss reflective finish.
Alt: Coated paper dried under pressure against a polished cylinder to produce a high-gloss enamel finish.

Casting machine: Piece of equipment used to form each letter or character of type from melted metal.

CCD: Acronym for Charged Couple Device. An electronic scanning device used in imaging systems.

CD-ROM: Acronym for Compact Disc-Read-Only Memory. A CD-ROM drive uses the CD format as a computer storage medium.

Cellosolve*J*: A trade name of Union Carbide Corporation for ethylene glycol monoethyl ether, a slow drying, active solvent.

Cellulose Acetate Butyrate: A clear thermoplastic material made from cellulose, reacted with both acetic and butyric acid. Used as a packaging film and in coatings, laminations, etc.

Centipoise: A unit of measure of viscosity; 100 centipoise equal one poise. Water has a viscosity of 1 centipoise (CP)

Central Impression Cylinder Press: Printing press in which the web being printed is in continuous contact with a single large diameter impression cylinder. The color stations are moved in to the central impression cylinder for printing and are arranged around its circumference.

Chalking: In printing, a term which refers to improper drying of ink. Pigment dusts off because the vehicle has been absorbed too rapidly into the paper.

Character generation: The production of typographic images using font master data. Generated to screens or output devices.

Chemical pulp: In papermaking, treatment of ground wood chips with chemicals to remove impurities such as lignin, resins and gums. There are two types, sulfite and sulfate.

Chemistry: In photography and platemaking, a term used to describe the composition of processing solutions.

Chill role: The printing roll carrying the background or overall pattern.

China clay: A natural white mineral pigment used in paper coatings and as an ink extender.

Chipboard: A low quality non-test paperboard made of waste paper for use where specified strength or quality are not necessary.

Chlorinated rubber: A chemical compound of chlorine and rubber latex forming a binder for Type T inks. Commercial trade names are Parlon and Alloprene

Choke (choking): When trapping color closing the open spaces in a graphic to be filled with another color.
Alt: Overlap of overprinting images to avoid color or white fringes or borders around image detail called trapping in digital imaging systems.

Choke roll: The printing roll carrying the background or overall pattern.

Chop mark: Embossed mark placed on the bottom border of a print to identify the artist, printer, or publisher.

Chromalin: A color proofing system. All AA's and corrections should have been made prior to seeing a Chromalin.

Chrome: A term for a transparency.

Chrome green: A fairly light resistant opaque green pigment made by mixing freshly precipitated iron blue and chrome yellow.

Chrome yellow: A light resistant opaque yellow pigment composed essentially of lead chromate.

Chromium plate: A thin covering of chromium - usually over a copper or nickel base.

Circumferential register control: See running register.

Clamp Marks: Marks produced by the clamps that hold the stock in position for guillotine trimming.

Clay coated board: A high quality paperboard having a surface coating of pigment or pigment-like solids and appropriate binders.

Clean hole: In paper making, a paper defect caused by restricted drainage on the wire in the paper machine in the absence of any foreign matter or contamination.

Cling: Tendency of adjacent materials to adhere to each other as in blocking, except that the surfaces can be separated without any visible damage.

Closed loop system: In printing, a completely automatic control system.

CMYK: The acronym for the four process color inks: Cyan (Blue), Magenta (Red), Yellow and Black.

Coated paper: A clay coated printing paper with a smooth finish.
Alt: Paper having a surface coating which produces a smooth finish. Surfaces vary from eggshell to glossy.

Coated freesheet: In gravure and flexography, the highest grade of paper, containing no ground wood and offering the highest and brightness.

Coated groundwoods: The most widely used grade of paper for magazines, classed as #5 Publication Coated papers.

Coating: In platemaking, the light-sensitive polymer or mixture applied to a metal plate. In printing, an emulsion, varnish or lacquer applied over a printed surface to protect it.
Alt: The outer covering of a film or web. The film may be one side coated or two sides coated.

Cobwebbing: A filmy, web-like build-up of dried ink or clear material on the doctor blade, or on the ends of impression rolls.

Cockling: A rippling effect given to the surface of a sheet of paper that has not been properly dried. Moisture pickup of the sheet can also cause the cockling or wavy edges.

Coefficient of friction tester: A device for measuring the slip resistance of various flexible substrates having an inclinable plane and block upon which to attach samples to attached.

Cohesion: That form of attraction by which the particles of a body are united throughout its mass.

Cold color: In printing, a color with a bluish cast.

Collate: In binding, a finishing term for gathering paper in a precise order.

Collateral Materials: Accompanying or auxiliary material such as advertising and promotional items.

Color comprehensive: Design work that illustrates in detail all elements of the proposed finished reproduction. Such as size, layout, color, copy, copy positioning, type style, etc.

Colorant: The color portion of an ink; may be a pigment, dye or combination of the two.

Color balance: The correct combination of cyan, magenta and yellow to (1) reproduce a photograph without a color cast, (2) produce a neutral gray, or (3) reproduce the colors in the original scene or object.

Color bar: A quality control term regarding the spots of ink color on the tail of a sheet.

Color blocks: Small square patches of a single color attached to artwork to indicate colors specified by the artist. In gravure, squares placed on cylinders to indicate ink colors to be used in the press.

Color correction: Methods of improving color separations.

Alt: Any method such as masking, dot-etching re-etching and scanning, used to improve color rendition.

Color filter: Filters used in making color separations, red, blue, & green.

Alt: A sheet of dyed glass, gelatin or plastic, or dyed gelatin cemented between glass plates, used in photography to absorb certain colors and transmit others. The filters used for color separation are blue, green, and red.

Colorimeter: An instrument for measuring color the way the eye sees color.

Color key: Color proofs in layers of acetate.

Alt: A printer's proof, actually four sheets of colored acetate, for examining the quality of process color separations.

Color matching system: A system of formulated ink colors used for communicating color.

Color overlap: The slight extension of one color over another.

Color overlay: A transparent overlay, usually acetate, on a Black & White drawing on which each additional color is indicated as a guide for reproduction. A term sometimes used at press side referring to the number of colors that overprint each other.

Color process: Halftone color printing created by the color separation process whereby a piece of copy is broken down to the primary colors to produce individual halftones and these are recombined at the press to produce the complete range of colors of the original.

Color proofs: See off-press proofs, progressive proofs.

Color separations: The process of preparing artwork, photographs, transparencies or computer generated art for printing by separating into the four primary colors.

Alt: Literally separating the areas of a piece to be printed into its component spot and process ink colors. Each color to be printed must have its own printing plate.

Color stations: Each section of the press or set of rollers used to print each individual color.

Color transparency: A full-color photographic positive image on a transparent support. Usually viewed with the aid of a lighted color transparency viewer.

Colorway: A specific combination of colors in a pattern of a transfer printed design.

Comb bind: To plastic comb bind by inserting the comb into punched holes.

Combination plate: A single engraving that includes both line and halftone.

Commercial register: Color printing on which the misregister allowable is within ∀ one row of dots.

Common impression cylinder press: In flexography, letterpress, and lithography, a press with a number of printing units around a large impression cylinder.

Composite film: Combining two or more images on one or more pieces of film.

Complimentary colors: A pair of contrasting colors that produce a hue neutral in color and value when mixed in suitable proportions.

Composing stick: A unit used to hold each individual character of type that is needed. The type can be locked into position until the proofs are pulled or a cast is made.

Compression set: The extent to which distortion of rubber expressed as percentage of the original thickness has become permanent, after subjecting a test piece to a known load, for a specified time between plates.

Computer, analog: A computer that solves a mathematical problem by using analogs, like voltage or density, of the variables in the problem.

Computer, digital: A computer that processes information in discrete digital form.

Compressibility: The behavior of paper under pressure, such as that applied by the gravure impression roller. A function of basis weight and caliper. No separate test for compressibility exists, but is evaluated during tests for smoothness.

Computerized composition: An all-inclusive term for the use of computers to automatically perform the functions of hyphenation, justification and page formatting.

Condensed type: A narrow or slender typeface.

Consistency: Property of a material that is evidenced by its resistance to flow. The general body characteristics of an ink, for example, viscosity, uniformity. Mostly used to describe the rheological property of an ink - such as "thick", "thin", "buttery".

Constant gloss test: A paper test for gloss used on matte or uncoated papers, used to determine if undesirable reflections will hamper readability of the printed sheet under normal viewing conditions.

Contact angle: Actual wiping angle of doctor blade on cylinder. Resultant of forces at work in the particular application.

Contact area: Area of doctor blade in actual contact with print cylinder when wiping.

Contact positive: A positive made from a negative by exposure to light in a contact frame, either continuous tone or screened.

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

Contact screen: A halftone screen on film having a dot structure of graded density, used in vacuum contact with the photographic film to produce halftones.

Continuous-tone copy: Illustrations, photographs or computer files that contain gradient tones from black to white or light to dark.

Contrast: The tonal change in color from light to dark.

Control chart: A visual record of quality performance in a statistical process that is produced by plotting the value of each sample drawn from the process in graph form with the number of the observation along the horizontal axis and the value of the observation along the vertical axis.

Conversion: The process of creating a three dimensional (3D) item from a flat sheet of paper. i.e. envelope conversion/box conversion.

Converter: Refers to that type of manufacturer who produces printed rolls, sheets, bags or pouches, etc., from printed rolls of film, foil or paper.

Copy: All furnished material or disc used in the production of a printed product.

Copyfitting: In composition, the calculation of how much space a given amount of copy will take up in a given size and typeface. Also, the adjusting of the type size to make it fit in a given amount of space.

Copy preparation: Directions for, and checking of, desired size and other details for illustrations, and the arrangement into proper position of various parts of the page to be photographed or electronically processed for reproduction.

Copyright (8): A group of legal rights granted to the author or creator of written or visual work. All work appearing with the 8 symbol or word "copyright" is protected by its creator or his heirs. For more information contact an attorney.

Copy viewer: Any device for viewing copy, such as an overhead light from viewing reflective copy, or a light box for viewing transparencies.

Copy writer: The individual who writes the prose or "copy" for an advertisement or brochure.

Core: A tube on which paper, film, or foil is wound for shipment. The metal body of a roller which is rubber covered.

Core holder: Device for affixing core to shaft.

Corrugation marks: A paper defect having the appearance of "rope" or "chain" marks parallel to the direction of web travel, caused by adjacent hard and soft spots.

Counterchange: To alternate tonal values within a design, e.g. from light against dark to dark against light.

Cover paper: A heavy printing paper used to cover books, catalogs, brochures, booklets, make presentation folders, etc.

Coverage: Ink or coating mileage: The surface area covered by a given quantity of ink or coating material. In flexography, the extent or degree to which a base material is covered, colored, or hidden by an ink or coating. Hiding power.

Cover sheet: A layer of clear material that is taped or laminated over artwork or proofs to protect the surface from damage.

Crash: Excessive impression of plate to stock or transfer roll to plate. Characterized by halo effect or double outline.

Crash finish: A paper finish with a surface similar to coarse linen.

Crash number: Numbering paper by pressing an image on the first sheet which is transferred to all parts of the printed set.

Crawling: That property of an ink film in which the wetting of the surface is too poor the film from contracting into drops, leaving a discontinuous covering.
Also See *Mottle*.

Creep: The deformation, in either cured or uncured rubber under stress, which occurs with lapse of time after immediate deformation. With rubber covered rolls, the metal roll body is subject to creep, as well as the rubber. Creep can also occur when a roll is kept in storage without turning.

Creepage: The slight continuous cumulative tendency of a color to drift out of register or position, in the running direction.

Crimp seal: A seal formed with a corrugated pressure type of heat seal mechanism. The seal has a wavy appearance.

Crimping: Puncture marks holding business forms together.

Chromalin: Trade name for DuPont color proofs.

Crop: To eliminate portions of the copy, usually on a photograph or plate, indicated on the original by *cropmarks*.

Alt: To cut off parts of a picture or image.

Crop marks: Printed lines showing where to trim a printed sheet.

Cropping: Trimming off unwanted areas of an illustration, photo, or other art work.

Cross-deckle Misregister: Misregister caused by shrinking of a web between printing units.

Cross direction: In paper, the direction across the grain. Paper is weaker and more sensitive to changes in relative humidity in the cross direction than the grain direction.

Cross hatch: Regularly crossed over parallel lines to create various effects of tones and shades.

Crossmarks: See register marks.

Crossover: Printing across the gutter or from one page to the facing page of a publication.

Crown: The difference in diameter between the center of a roll and reference points at or near the ends of the face.

CRT: Acronym for Cathode Ray Tube - a video display.

CTP: Acronym for Computer-to-Plate.

Cure or Curing: 1) Conversion by chemical reaction of a wet coating or printing ink film to a solid film. 2) Also refers to the addition of a catalyst.

Alt: The step in the manufacture of a rubber roller or a rubber plate in which it is subjected to temperature elevation under pressure for a length of time to vulcanize the elastomer until it reaches its optimum in elasticity and tensile strength. As applied to rubber rollers, the aging cycle required following vulcanization. To treat (with heat) to make infusible.

Curl: In paper, the distortion of a sheet due to differences in structure or coatings from one side to the other, or to absorption of moisture on an offset press.

Curve direction: Direction of web travel on a flexo press.

Cut: Gravure/Flexography - To dilute an ink, lacquer or varnish with solvents or with clear base; to thin.

Cut-back: The process of reducing the size of an image so that the printed area produced by such a cut-back can be covered by an overprinting area.

Cut-off: In web printing, the cut or print length.

Cutscore: In die-cutting, a sharp-edged knife, usually 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.

Cyan: One of four standard process colors. The color blue.
Alt: Hue of a subtractive primary and a 4-color process ink. It reflects or transmits blue and green light and absorbs red light.

Cylinder: In flexography, for no particular reason, most rollers in the printing press are called rolls which the rubber plates are mounted, and the one which receives the impression, and these are usually referred to as cylinders, i.e., Plate Cylinders, Impression Cylinder.

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.

Damper: Usually a pivoted gate or valve used to control the flow of air or other gases, as in the dryer.

DDES: Acronym for Digital Data Exchange Specifications.

Deckle: In papermaking, the width of the wet sheet as it comes off the wire of a paper machine.

Deckle edge: The untrimmed feathery edges of paper formed where the pulp flows against the deckle.

Deflection: Deviation from a straight line under load. Fountain roll pressure against the anilox roll causes both to bend or bow slightly. Excessive bending of both either one will result in uneven ink metering and subsequent non-uniform printing.

Defloculation: The dispersion of pigment clusters to smaller units in an ink; the reverse of flocculation.

Delamination: The partial or complete separation of the layers of a laminate.

Densitometer: A quality control device to measure the density of printing ink.
Alt: In photography, a photoelectric instrument which measures the density of photographic images, or of colors. In printing, a reflection densitometer is used to measure and control the density of color inks on the substrate.

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

Descender: That part of a lower case letter that extends below the main body, as in "p".

Desensitizer: In platemaking, chemical treatment to make non-image areas of a plate repellant to ink. In photography, an agent for decreasing color sensitivity of photographic emulsion to facilitate development under comparatively bright light.

Design roll: Printing cylinder' with elastomeric plates affixed in position, for all-over printing.

Desktop publishing: A process for creating camera ready and plate ready artwork on a personal computer.

Developer: In photography, the chemical agent and process used to render photographic images visible after exposure to light. In lithographic platemaking, the material used to remove the unexposed coating.

Dial indicator: A watch-like instrument used to measure concentricity, run-on, deflection, and relative position of mechanical components.

Diatomaceous Earth: A substance consisting of the skeletons of billions of microscopic plankton, containing a high amount of silicon. A common paper filler, also used in ceramics, glazes and dynamite.

Diazo: A light sensitive coating used on printing plates.

Die: Metal rule or imaged block used to cut or place an image on paper in the finishing process.
Alt: Any of various sharp cutting forms, rotary or flat, used to cut desired shapes from paper, paperboard or other stocks. Also a carry-over term for printing plates in flexo industries previously letterpress which in early years used metal printing plates, i.e., corrugated, publications, etc.

Die cut (verb): To punch out with a sharp tool Cleft, gash, slit or notch left from punching out operation.

Die-cutting: Cutting images in or out of paper.
Alt: The process of using sharp steel rules to cut special shapes for labels, boxes and containers, from printed sheets. Die-cutting can be done on either flatbed or rotary presses. Rotary die-cutting is usually done in-line with the printing.

Die-stamping: An intaglio process for the production of letterheads, business cards, etc., printing from lettering or other designs engraved into copper or steel.

Diffusion: A spreading out or equalized dispersion of a material, force, or condition into the surrounding medium; as, the diffusion of heat by conduction; the diffusion of light through a translucent material or reflection from a rough surface; the diffusion of gases, liquids or granular solids into the surrounding medium.

Diffusion transfer: In photography and platemaking, a system consisting of a photographic emulsion on which a negative is produced, and a receiver sheet on which a positive of the image is transferred during processing.

Digital color proof: An off-press color proof produced from digital data without the need for separation films.

Digital imaging: The process of creating a digital copy of an illustrated or photographic image.

Digital photography: The process of recording images using a digital camera or a conventional camera with a digital adapter.

Digital plates: Printing plates that can be exposed by lasers or other high energy sources driven by digital data in a platesetter.

Digital printing: A system of printing, which involves linking state of the art printing presses and computers, bypassing the traditional route of making printing plates.
Alt: Printing by plateless imaging systems that are imaged by digital data from prepress systems.

Digitized typesetting: In typographic imaging, the creation of typographic characters and symbols by the arrangement of black-and-white spots called pixels or pels.

Digitizer: A computer peripheral device that converts an analog signal (images or sound) into a digital signal.

Dilatent: Having the property of increasing in viscosity with increase in shear. Dilatent fluids are solid or highly viscous when stirred, and fluid when undisturbed. The condition can occur in flexo inks but is normally considered highly undesirable and one to be avoided through formulation.

Diluent: A liquid having no solvent power by itself, used to thin an ink; not having a solvent action.

Dimensional stability: Ability to maintain size; resistance of paper or film to dimensional change with change in moisture contact or relative humidity.

Direct screen halftone: In color separation, a halftone negative made by direct exposure from the original on an enlarger or by contact through a halftone screen.

Dispersing Agents: Materials added in small amounts to facilitate dispersion of a pigment into a liquid medium; also, wetting agents. (Ink Additive)

Display type: In composition, type set larger than the text.

Distorted: Intentionally compensating of solid particles in a vehicle by mixing or milling.

Distortion copy: Copy which is intentionally distorted in preparation, in order to compensate for the effects of dimensional changes due to subsequent processing or operation. Flexographic printing requires such allowances to compensate for shrinkage, stretch, etc.

Distortion plate: Plates made from distortion copy.

Dithering: A technique of filling 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.

Doctor blade: In gravure and flexography, a knife-edge blade pressed against the engraved printing cylinder that wipes away the excess ink from the non-printing areas.

Alt: Thin flexible steel blade that passes over a cylinder, wiping off excess ink before impression is made on paper. In the pressroom, refers to the entire assembly consisting of blade, doctor blade holder, and all necessary adjusting and loading devices.

Doctor blade holder: Upper and lower clamp supports for doctor and back-up blades. Gravure/Flexography

Doctor blade Loading: Applying doctor blade pressure against the engraved cylinder. Gravure/flexography

Doctor roll: The fountain roll in a flexographic press.

Dot: An element of halftones. Using a loupe you will see that printed pictures are made up of many dots.

Dot etching: In photography, chemically reducing halftone dots to vary the amount of color to be printed. Dot etching on negatives increases color; dot etching on positives reduces color.

Dot gain or spread: A term used to explain the difference in size between the dot on film versus on paper.

Alt: A phenomenon, which occurs when wet ink comes in contact with paper. As the halftone dots are applied to the paper, the wet ink spreads, causing the dots to increase in size and halftones to appear darker. A number of factors affect dot gain.

Dot growth: The enlargement of a halftone dot from the printing plate to the printed image as a result of pressure needed to transfer the ink onto the substrate.

Dots per inch (dpi): A measure of the resolution of a screen image or printed page. Spots per inch (spi) is a more appropriate term.

Double burn: Exposing a plate to multiple images.

Doughnut: The appearance of a screen dot that has printed the circumference of the cell while not printing a complete dot.

Dragout: 1) Excessive ink around shadow areas of the image; usually associated with excessively deep etches, on a non-absorbent (coated) paper. 2) Build-up of pigments on edge of doctor blade which release and occasionally print on the web.

Draw-down: A sample of ink and paper used to evaluate ink colors.

Alt: In ink making, a term used to describe ink chemist's method of roughly determining color shade. A small glob of ink is placed on paper and drawn down with the edge of a putty knife spatula to get a thin film of ink.

Drier: In ink making, a substance added to hasten drying.

Drift: 1) The continued deformation of rubber under strain. 2) The change in a given durometer reading after a specified period of time.

Driving Side: The side of a flexographic press on which the main gear train(s) are located; also gear side; opposite of operating side.

Drop-out: Portions of original artwork that do not reproduce or print, especially colored lines or background areas (often on purpose).

Dry back: The change in color or finish of an ink film as it dries.

Dry color: Pigment in dry or powder form.

Dry cut: A paper defect consisting of a long cut in the paper. This is a calendar cut occurring without wrinkling.

Dryer: The auxiliary unit of a flexographic or gravure printing press through which the printed web travels and is dried prior to rewinding. A drying unit placed as required between the color stations.

Drying in: Ink drying in cells of a anilox roll or gravure cylinder. In screenprinting, a state where ink has started to dry onto the screen, causing the mesh to clog and resulting in loss of detail and poor definition.

Dry-up: See catching up.

Dull-coated: A moderately glossy coated publication stock, more reflective than matte, but less so than glossy.

Dummy: A rough layout of a printed piece showing position and finished size.
Alt: A preliminary layout showing the position of illustrations and text as they are to appear in the final reproduction. A set of blank pages made up in advance to show the size, shape, form and general style of a piece of printing.

Duotone: A halftone picture made up of two printed colors.

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

Duplicating film: A film for making positives from positives, and negatives from negatives. In color reproduction, a special film used for making duplicates of color transparencies.

Dwell: The time interval during which elements remain in contract or in a static position; pause.

Dye: A colored substance, usually differing from a pigment tin its solubility in various solvents.

Dye transfer: In photography, a process of producing color prints by tanning photographic emulsions and using them to transfer dye solutions to film or paper coated with gelatin.

Dylux: Photographic paper made by DuPont and used for bluelines.

Dynamic balance: When the rotating masses are in equilibrium.

Dynamic range: Density difference between highlights and shadows of scanned subjects.

Eccentricity: Off center or out-of-round condition, such as a roll or cylinder which does not rotate in a true concentric circle in relation to its axis.

Edge guide: See *web guide*.

Editing: To review original copy and make necessary changes or corrections before the type is finally set.

Efflorescence: A specific form of spontaneous desiccation (drying up). The property of a crystalline substance to become dehydrated or anhydrous when exposed to air and to crumble to a powder. Opposite of delinqescence.

Efflux cup: A simple viscometer such as the Zahn, Shell or Hiccup, which give viscosity readings rapidly in terms of the number of seconds required for the cup to empty through an orifice of known size. Gravure/Flexographic/Screen

Eggshell finish: A paper similar in appearance to that of an eggshell, and usually with a light cream or "off-white" color.

Elastic Elongation: The ability of a material to stretch without breaking. To describe this properly as measured, it is more accurate to speak of "ultimate elongation" or "elongation at break" since its value, expressed as per cent of original length, is taken at the moment of rupture.

Elasticity: The property of a substance that enables it to return to its original size or shape after being stretched or deformed.

Elastomer: Any rubber-like substance or polymer.

Elastomeric: Flexible and resilient.

Electronic dot generation (EDG): A method of producing halftones electronically on scanners and prepress systems.

Electronic printing: Any technology that reproduces pages without the use of traditional ink, water or chemistry.

Electronic publishing: A new process by which information is distributed in electronic or magnetic formats. (i.e. articles available on computer services or books on CD ROM.)

Electronic color scanner: This device brings the flexibility of electronic controls to photographic techniques in continuous tone color separations. A high-speed computer is built into the scanner that instantaneously calculates the necessary color correction from the original copy.

Electrophotography: Image transfer systems used in copiers to produce images using electrostatic forces.

Electrotype: Duplicate relief plate used for letterpress printing.

Elliptical dot: In halftone photography, elongated dots that give improved gradation of tones particularly in middle tones and vignettes - also called chain dots.

Elmendorf test: A test that determines the tearing resistance of paper.

Elongation: Longitudinal deformation resulting from stress, from stretching.

Emboss: Pressing an image into paper so that it will create a raised relief.

Embossed finish: Paper with a raised or depressed surface resembling wood, cloth, leather or other pattern.

Em space: A lateral space equal to the width f the lower case letter "m".
Alt: In composition, a unit of measurement exactly as wide and high as the point size being set. So named because the letter "M" in early fonts was usually cast on a square body.

Emulsion: Light sensitive coating found on printing plates and film.
Alt: The chemically treated side of photographic film. (The dull side not the shiny side.) Depending on the printing process involved, film will be requested as "right reading" emulsion up or emulsion down.

Emulsion side: In photography, the side of the film coated with the silver halide emulsion.

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

Endprinter: See In-line Press.

End product: The final package or printed piece after all blanking, folding, gluing, or heat sealing is done ready for customer use.

English finish: A grade of book paper with a smoother, more uniform surface than machine finish.

En space: A lateral space equal to half an em space, roughly the width of a lower case "n".

Engraved printing: Raised printing produced by a cutaway plate. A similar effect can be achieved with thermography.

Engraved roll: Transfer roll having mechanically engraved cells. See *Anilox Roll.*

Engraving: A general term normally applied to any pattern which has been cut in or incised in a surface by hand, mechanical or etching processes.

Epoxy resins: Plastic or resinous materials used for strong, fast setting adhesives, as heat resistant coatings and binders, etc.

EPS (EPSF) Encapsulate Postscript file: A vector based, computer graphics file format developed by Adobe Systems. EPS is the preferred format for many computer illustrations, because of its efficient use of memory and fine color control.

Alt: An alternative picture file format that allows Postscript data to be stored and edited and is easy to transfer between Macintosh, MS-DOS and other systems.

Equalizer rod / Meyer rod: A metal rod wound with fine wire around its axis so that liquids can be drawn down evenly at a given thickness across a substrate. Flexographic / Gravure printing.

Equivalent weights of paper: Indicates weights of different sizes and different ream weights but of identical basis or substance weights, e.g., 25x38-50 is equivalent in substance to 32x44-74.

Etch: In photoengraving, to produce an image on a plate by chemical or electrolytic action. In offset lithography, an acidified gum solution used to desensitize the non-printing areas of the plate; also, an acid solution added to the fountain water to help keep non-printing areas of the plate free from ink.

Ethyl cellulose: A cellulose ether, soluble in most organic and hydrocarbon solvents, available as a transparent flexible packaging film. Also used as an ingredient in inks, coatings and adhesives.

Eurobind: A patented method of binding perfect bound books so they will open and lay flatter.

Evaporation: The changing from the liquid to the gaseous or vapor stage, as when the solvent leaves the printed ink film.

Expanded type: A type whose width is greater than normal.

Expansion ratio: For foam inks, the ratio of foam volume to original ink liquid, e.g., 7:1 air to ink.

Expose: To subject (a sensitive film, plate, etc.) to the action of lights.

Exposure: The step in photographic processes during which light produces the image on the light-sensitive coating.

Extenders: Materials used to weaken, or extend, a fountain ink without changing its viscosity; usually an extender varnish or an extender transparent white.

Extensible: Stretchable as in many packaging materials such as polyethylene which elongate during processing.

Extrusion: The production of a continuous sheet or film (or other shapes not connected with flexography) by forcing hot thermoplastic material through a die or orifice.

Extrusion coating: A process whereby paper stock is coated by extrusion, normally plastic such as polyethylene; extrusion laminating.

Eye marker or eye spot: A small rectangular printed area usually located near the edge of a web or design, to activate an automatic electronic position regulator for controlling register of the printed design with subsequent equipment or operations.

Face printing: Printing on the outer surface of a transparent film in contrast to printing on the back (reverse) of film.

Facsimile transmission: The process of converting graphic images into electronic signals.

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

Fading: The change of strength or color on exposure to light, heat, or other influences.

Fake color: In color reproduction, producing a color illustration by using one image as a key and making the other separations from it manually.

False body: Thixotropic flow property of a fluid. When a composition thins on stirring and thickens on standing it is said to exhibit false body.

Fanout: In printing, 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.

Fastness: Term used to denote the stability or resistance of stock or colorants to influences such as light, alkali, etc.

Fast solvent: Solvent of low boiling point that evaporates rapidly; a fast-drying solvent.

Feathering: A ragged or feather edge that shows at the edge of type or cuts.

Feeder: In printing presses, the section that separates the sheets and feeds them in position for printing.

Felt: Fabric used to carry the web of paper between press and dryer rolls on the paper machine.

Felt mark: An imperfection in paper surface caused by a coarse felt or the warp of a felt leaving a textured impression on the surface.

Felt side: The smoother side of the paper for printing. The topside of the sheet in paper manufacturing.

Fiberboard: Fiber sheets that have been produced or laminated to a thickness that provides a degree of stiffness. Fiberboard used for container production may be corrugated board; or solid board, the thicknesses of which are most commonly 0.060, 0.080, 0.100, 0.120, or 0.140 inch. A generic name applied to many products made of fiberboard.

Fiberboard, solid: Heavy, solid board, usually 3 or 4 ply, made of two liners and a filler of chipboard, used in shipping containers.

Filler: Inert substance in a composition to increase bulk, strength, and/or lower cost, etc.

Fill-in: Generally used to refer to the open portions of small type and half tones filled by ink.

Film: Unsupported, basically organic, nonfibrous, thin, flexible material of a thickness not exceeding 0.010 inch. Such material in excess of 0.0100 inch in thickness is usually called "sheeting". A variety of special designations, such as gussetted film, "J" film, "U" film, "W" film, etc. refer to films wound with a single or double fold or gusset on one or both sides, the designations describing the shape of a cross-section.

Film, cast: Generally refers to films made by coating, or casting, a solution of a film former on an endless belt, drying the solvents, stripping the film from the belt and winding it up. Polyethylene cast film refers to the film made by extruding the molten polyethylene through a flat die onto a series of relatively cool rolls to chill it and winding-up the film so formed.

Film Former: A type of resin (binder) with qualities of forming a tough, continuous film; usually refers to such plastics as ethyl cellulose, nitrocellulose, chlorinated rubber and vinyl used in inks and coatings.

Film gauge: A number indicative of the thickness of films.
Film treatment: The surface oxidation of film to increase adhesion of inks.

Film, tubular: Generally used to mean polyethylene tubular film - produced by extruding the molten polyethylene in the form of a tube through a round die, cooling the plastic, flattening the tube so formed by means of nip rolls, and winding it up.

Filling in (or filling up): In letterpress or offset lithography, a condition where ink fills the area between the halftone dots or plugs up (fills in) the type.

Film rip: See Rip film.

Fineness of grind: The degree of grinding or dispersion of a pigment in a printing ink or vehicle. Extent to which particle size has been reduced to its ultimate by grinding technique. Fineness of granular structure.

Finish: The degree of gloss or flatness of a print or surface.

First down color: The first color printed on the substrate.

Fixer: Chemical used to stop the developed photographic image from continuing to develop.

Fixing: Chemical action following development to remove unexposed silver halide, to make the image stable and insensitive to further exposure.

Flash exposure: In halftone photography, the supplementary exposure given to strengthen the dots in the shadow areas of negatives.

Flag: A small piece of paper or board inserted in a roll of stock being run so that it extends beyond the edge, to indicate the location of a splice, imperfection, etc., or to designate some change from standard quality, speed, condition; a warning to the operator handling the material during the next operation in the converting process.

Flat: A photograph or halftone that is lacking in contrast.

Flat bed press: A press-like piece of equipment used in transfer printing to transfer the design by sublimation from paper to fabric.

Flat seal: A heat seal characterized by being flat. Compare with crimp seal.

Flatbed scanner: A device that scans images in a manner similar to a photocopy machine; the original art is positioned face down on a glass plate.

Flat etching: The chemical reduction of the silver deposit in a continuous-tone or halftone plate, brought about by placing it in a tray containing an etching solution.

Flex: Another term for deflection of rolls or cylinders in press. Also, bending qualities or characteristics, of any material, including printing substrates.

Flexible glue: Animal glue which has been plasticized so that permanently flexible films are formed. Commonly used to denote any flexible adhesive.

Flexing strength: The ability of a sheet or film to withstand breakage by folding. Flexing strength may be measured by a test to determine the number of folds required to cause failure.

Flexography: A method of direct rotary printing using resilient raised image printing plates, affixed to variable repeat plate cylinders, inked by a roll or doctor blade wiped engraved metal roll, carrying fluid or paste type inks to virtually any substrate.

Flocculation: The aggregation of pigment particles in the ink to form clusters or chains; may result in a loss of color strength and a change in hue.

Flood: To cover a printed page with ink, varnish, or plastic coating.

Flop: The reverse side of an image.

Flow: The property of an ink causing it to level out as would a true liquid. Inks of poor flow are classed as short in body, while inks of good flow are said to be long. Rheological properties of a fluid.

Fluidity: The ability of a material to flow. The ease of flow of a material. As opposed to viscosity, the greater the viscosity the less fluidity.

Fluorocarbons: Organic compounds in which fluorine atoms are bonded to carbon atoms. Example, Teflon* - Trade Mark Reg. DuPont.

Flush cover: A cover that has been trimmed the same size as the inside text pages.

Flush left (or right): In composition, type set to line up at the left (or right). This page is set flush left and right.

Flush paragraph: A paragraph with no indention.

Flying: Ink thrown off the press by the inking rollers; throwing, splashing.

Flying paster: In web printing, an automatic pasting device that splices a new roll of paper onto an expiring roll, without stopping the press.

FM (frequency modulation) screening: A means of digital screening. See stochastic screening.

Foaming: A property of a liquid related to its surface tension; frothing. Foaming is a problem mostly with water base ink, usually occurring when inks are circulated through the ink pumps on a press fountain. Another class of inks, called foam inks, are purposely formulated to be applied as a foam.

Focal length: In photography, the distance from the center of the lens to the image of an object at infinity. At same size, the distance from copy to image is four times the focal length of the lens.

Focaltone: A proprietary color matching system for process color. (Similar to Pantone Matching System)

Fog: In photography, silver density in the non-image areas.
Alt: A defect in a print or negative containing a deposit of silver extraneous to the intended image. Fog may be caused by improper developing, or by light leaks in the darkroom.

F.O.G.: An acronym for Fats, Oils, and Greases a contaminant in waste water which is monitored and limited by municipal wastewater treatment regulations. Common contaminant in water based ink waste and compressor blow-down condensate.

Foil: A metallic or pigmented coating on plastic sheets or rolls used in foil stamping and foil embossing.

Foil emboss: Foil stamping and embossing a image with a die.

Foil stamping: Using a die to place a metallic or pigmented image on paper.
Alt: A mechanical process that results in the bonding of colored foil to paper.

Foldover: A slitter-caused defect in paper consisting of a rough, irregular edge, either nicked or torn, often accompanied by slitter dust. Also called turnover.

4-color-process: The process of combining four basic colors to create a printed color picture or colors composed from the basic four colors.

Folio: The page number.

Font: Complete assortment of all the different characters of a particular style and size of type.

Form rollers: The rollers, either inking or dampening (lithography), which directly contact the plate on a printing press.

Format: The size, style, type page, margins, printing requirements, etc., of a printed piece.

Formation: Arrangement of the fibers in a sheet of paper. Irregular arrangement is "wild", uniform formation is "close".

Fountain: A pan or trough on a flexographic press in which the fountain roller revolves. Sometimes loosely applied to the entire printing station.

Fountain roll: Roll that picks up ink or coating material from the fountain and applies it to the transfer roll.

Free sheet: Paper free of mechanical wood pulp.

Freeze/Thaw Stability: The ability of an ink system to undergo freezing and thawing cycles.

"f" stops: In photography, fixed stops for setting lens apertures.

French fold: Two folds at right angles to each other.

Frequency distribution: A grouping of statistical data in either tabular or graphic film.

Front end system: In electronic publishing, the workstation or group of work stations containing the applications software for preparing pages of type and graphics.

Fugitive: 1) Poor color fastness because of exposure to light, heat or other agents.

2) Term used to describe unstable plasticizers that leave a printed film because of their volatility.

Furnish: The list of ingredients that make up a particular paper.

Fuse: To join two surfaces by heating them to their melting or softening point.

Fusible: Capable of being melted or liquefied by action of heat.

Fuzz: Fibrous projections on the surface of a sheet of paper. Lint appears in much the same manner but is not attached to the surface.

Gauge: Also gage. 1) (Noun) an instrument for exact measuring. 2) (Verb) to measure exactly. 3) A standard measure, usually of thickness or diameter, expressed by a number which has a standard dimensional equivalent that varies for different materials and for different standards.

Galley proof: Text copy before it is put into a mechanical layout or desktop layout.

Gamma: A measure of contrast in photographic images.

Gang: Getting the most out of a printing press by using the maximum sheet size to print multiple images or jobs on the same sheet. A way to save money.

Gathering: In binding, the assembling of folded signatures in proper sequence.

GCR: Acronym for Gray Component Replacement.

Gear chart, or gear selector: A handy reference compilation of the various printing lengths, or repeats, obtainable within the different gearing systems.

Gear marks: A defect in flexographic printing. Usually appears as uniformly spaced, lateral variations in tone exactly corresponding to the distance between gear teeth.

Gear side: See driving side.

Gear streaks: In printing, parallel streaks appearing across the printed sheet at same interval as gear teeth on the cylinder.

Gel: A state or condition which an ink or vehicle has a jellylike consistency.

Gelatin: A hard, colloidal protein, an animal byproduct (mostly from bone). Dissolves in hot water, but is insoluble in alcohol and some other solvents. Used as a coating for carbon tissue and other photographic products.

Generation: Stages of reproduction from original copy. A first generation reproduction yields the best quality.

Generic: Pertaining to or applicable to all members of a genus or class.

Generic designs: Not protected by trademark registration.

Ghost bars: A quality control method used to reduce ghosted image created by heat or chemical contamination.

Ghosting: A faint printed image that appears on a printed sheet where it was not intended. More often than not this problem is a function of graphical design. It is hard to tell when or where ghosting will occur. Sometimes you can see the problem developing immediately after printing the sheet, other times the problem occurs while drying. However the problem occurs it is costly to fix, if it can be fixed. Occasionally it can be eliminated by changing the color sequence, the inks, the paper, changing to a press with a drier, printing the problem area in a separate pass through the press or changing the racking (reducing the number of sheets on the drying racks). Since it is a function of graphical design, the buyer pays for the increased cost.

GIF: An eight bit (256 colors or shades of grey) or less computer file format. Though commonly used to post photographic images to computer bulletin boards, GIF files are almost never used for professional printing.

Gigabyte (GB): One billion bytes.

Glassine: A type of translucent paper.

Gloss: A shiny look reflecting light.

Gloss Ink: An ink that dries with a minimum of penetration into the stock and yields a high luster.

Gloss Meter: An instrument used to measure the specular (mirror) reflectance from a surface at a given angle.

Glue line: The line of adhesive between the two surfaces to be adhered. Also paste line.

Grain: In papermaking, the direction in which most fibers lie which corresponds with the direction the paper is made on a paper machine.

Grain direction: The direction taken by a majority of the fibers in any sheet of paper. Synonymous with "machine direction", the opposite of "cross direction".

Grammage: A term in the metric system for expressing the basis weight of paper. It is the weight in grams of a square meter of the paper expressed in g/m2.

Graphic: A non-text item (illustration or photograph) to be printed.

Graphic design: A process of problem solving, using visual elements (pictures and type) usually to communicate a concept or idea.

Graphic designer: An individual who solves communication problems, using visual elements (pictures and type) to convey an idea or concept.

Gray balance: The dot values or densities of cyan, magenta and yellow that produce a neutral gray.

Gray level: The number of gray values that can be distinguished by a color separation filter - usually 256.

Gray scale: A strip of standard gray tones, ranging from white to black, placed at the side of original copy during photography to measure tonal range and contrast (gamma) obtained.

Grease proofness: Resistance of material to grease.

Greek: Usually nonsense words and letterforms used in a design to approximate the flow of written language. Used primarily before final text is available.

Grippers: The metal fingers on a printing press that hold the paper as it passes through the press.

Gripper edge: The leading edge of paper as it passes through a printing press. Also the front edge of a lithographic or wrap-around plat that is secured to front clam of plate cylinder.

Gripper margin: Unprintable blank edge of paper on which grippers bear, usually 2 " or less.

Grooving the cylinder: Cylinder damage due to foreign material.

Grounding: Removal of electric charges by leading them into the ground through electrical conductors.

Groundwood pulp: a mechanically-prepared wood pulp used in the manufacture of newsprint and publication papers.

Guillotine: Equipment used in finishing or binding operations to trim printed sheets.
Alt: A cutting machine in which the cut is made by a long knife that descends vertically on the material to be cut.

Gum: A water-soluble amorphous substance exuded by or prepared from plants, which is sticky when moist but hardens upon exposure to air; any material having the above properties, natural or synthetic, regardless of source. Loosely used in reference to unvulcanized rubber.

Gusset: The bellows fold or tuck on the side or bottom of a bag; the capacity of the bag is measured with the gusset unfolded.

Gutter: The blank space or inner margin from printing area to binding.

Hairline: A very thin line or gap about the width of a hair or 1/100 inch.

Hairline register: Register within ∀ 2 row of dots.

Halation: In photography, a blurred effect, resembling a halo, usually occurring in highlight areas or around bright objects.

Halftone: Converting a continuous tone to dots for printing.
Alt: A reproduction of a continuous-tone image (i.e. a photograph or painting), through a screening process, using fine dots of varying size and spacing to reproduce the shades and textures of the original.

Halo: An undesirable peripheral outline of the printed image.

Hand-set: When type is put into a composing stick by hand instead of by machine.

Hard chromium: Chromium plated for engineering rather than decorative applications. Not necessarily harder than decorative chromium. Gravure applications are hard chromium.

Hard copy: The permanent visual record of the output of a computer or printer. Also the material sent to a typesetter in typed form, for conversion into typeset material.
Alt: The output of a computer printer, or typed text sent for typesetting.

Hard proof: A proof on paper or other substrate as distinguished from a soft proof, which is an image on a VDT screen.

Hard sized: Refers to a type of paper that has been treated with considerable size to resist water. Opposite of slack-sized.

Hardware: Computer and peripherals as distinguished from software, which is a program for operating hardware.

Hard dot: See soft dot.

Headline copy: Larger, more important, copy of artwork.

Head margin: The white space above first line on a page.

Heat resistance: The ability to withstand the effects of exposure to high temperature. Care must be exercised in defining degree.

Heat seal: A method of uniting two or more surfaces by fusion, either of the coatings or of the base materials, under controlled conditions of temperature, pressure, and time (dwell).

Heat seal lacquer: A lacquer which when applied to a stock and dried, is capable of softening under heat and can be sealed to itself or other surface.

Heat sealing paper: Any paper coated with heat sealable materials.

Heavy-bodied inks: Inks of a high viscosity or stiff consistency.
Hermetic: Air tight or impervious to the passage of air.

Hexachrome: A proprietary color separation process, developed by Pantone that uses six (6) instead of four process colors.

Hiccup: A form of efflux cup viscometer.

High-bulk paper: A paper made thicker than its standard basis weight.

High key: Term used to describe photographs in which the majority of tones are lighter in value than a middle gray.

Highlight: The whitest or lightest areas in a picture represented in a halftone reproduction by the smallest dots or the absence of dots.

Holdout: In printing, a property of coated paper with low ink absorption which allows ink to set on the surface with high gloss. Papers with too much holdout cause problems with set-off.

Homogeneous: Of the same uniform composition or construction throughout.

Hot press: Paper with a smooth surface finish.

Hot scuff resistance: Resistance to abrasion or color bleed of a print when it is subjected to hot irons used for package sealing.

Hot type: When a casting of melted metal is used to set type copy instead of using the original type characters or a photographic process.

HSV: Acronym for hue, saturation and value (or brilliance or luminance)-a color space used in some graphic programs.

Hue: In color, the main attribute of a color that distinguishes it from other colors.

Humidifier: A device that causes water vapor to be diffused into the atmosphere of an enclosed area.

Humidity: The moisture condition of the air. Actual humidity is the number of grains of moisture in the air at any given time. Relative humidity is the percent of moisture relative to the maximum which air at any given temperature can retain without precipitation.

Hydrocarbon: Materials composed entirely of carbon and hydrogen. General term for family of petroleum solvents.

Hydrometer: An instrument used for measuring the specific gravity of a liquid.

Hygrometer: An instrument for measurement of the relative humidity of air.

Hygroscopic: The ability of a material to absorb or otherwise take up moisture from the surroundings.

Hysteresis: A loss of energy due to successive deformations and relaxation.

Icicles: Strings of dried ink hanging around cylinder area including applicator, bafflers, etc.

Idler rolls: Roller mechanisms on converting machines used to support, smooth or direct the web in its course of travel through a machine. Not driven.

Illustrator: An individual who draws or paints original artistic images for use in commercial art.

Image: A design or drawing.

Image area: Portion of paper on which ink can appear.

Image assembly: See stripping.

Image carrier: Any plate, form, cylinder or other surface which contains an image, receives ink, and transfers it to another surface or substrate, e.g., gravure cylinders, offset plates, and letterpress stereotypes.

Imagesetter: A high-resolution device that prints directly to plate ready film.

Imposition: The arranging of pages in a press form to ensure the correct order after the printed sheet is folded and trimmed

Alt: The process of positioning multiple pages on a flat sheet of paper to be printed at one time.

Impression: In printing, the pressure of type, plate or blanket as it comes in contact with the paper.

Alt: Putting an image on paper.

Impression bar: A small diameter rod or bar, supported by a back-up member of sufficient rigidity, mounted in place of the impression cylinder for running certain types of work, e.g., porous tissue. Gravure, Flexographic

Impression cylinder: In printing, the cylinder on a printing press against which the paper picks up the impression from the inked plate in direct printing, or the blanket in offset printing.

Imprint: Adding copy to a previously printed page.

Indicia: Postal information place on a printed product.

Infeed: A mechanism designed to control the forward travel of the web into the press.

Inhibitor: A substance or agent that slows or prevents chemical reactions even though present only in small quantities.

Ink, flexographic: Fast drying fluid or paste type inks for flexographic printing.

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

Ink holdout: A paper's ability to resist penetration of ink components beneath its surface.

Ink mist: Flying filaments or threads formed by long inks like newspaper ink.

Inkometer: An instrument for measuring the tack of printing inks.

In-line press: A press coupled to another operation such as bag-making, sheeting, die-cutting, creasing, etc. A multi-color press in which the color stations are mounted horizontally in a line.

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

Intaglio: Any printing process using a recessed image carrier. Refers to fin art copper plate printing from etchings; commercial copper plate " engraving" used for business cards, stationery, stamps and security printing; and all sheetfed and rotogravure printing. General used in an historical context, and to distinguish gravure from other processes, the term is falling into general disuse in the commercial sector of the industry.

Intensity: Purity of hue or color tone or the degree of hue as seen by the eye.

Interleave: To insert separate sheets of paper, etc., between foil, printed paper, or other stacked sheet material to facilitate handling or to prevent blocking or smudging.

Iridescent: A term used to indicate the property that is possessed by certain materials of exhibiting prismatic colors.

Irradiation: Treated with ultra-violet light or another high-energy ray.

Iodine number: A number that indicates that relative drying potential of vegetable oils; the higher the number, the faster the drying and oxidation.

Iron blue: A warm, purplish blue ink, also called *Milori Blue.*

Iron perchloride: Chemical used for copper cylinder etching. Chemical formula: $FeCl_3$. Also known as *ferric chloride*.

Italic: The style of letters that slant, in distinction from upright, or roman letters. Used for emphasis within the text.

Jelling: The thickening of an ink or other liquid which cannot be reversed by stirring.

Jet: Term used to describe the blackness or intensity of the mass tone of black or near black surfaces.

Jog: To align sheets of paper into a compact pile.

Journals: The end shafts on which a roll rotates.

JPEG: Joint Photographic Electronic Group: A common standard for compressing image data. JPEG is not commonly used in printing because of data loss.

Jumbo roll: A roll of web material the outside diameter of which is larger than standard diameter.

Justify: In composition, to space out lines uniformly to the correct length.

Kern: To adjust the lateral space between individual letters.

Key: To code copy to a dummy by means of symbols, usually letters. Insertions are sometimes keyed in like manner.

Keyboard: The input device to input information directly into a typesetter, computer, workstation or, as a stand-alone unit, to record it on paper or magnetic tape.

Keylines: In artwork, an outline drawing of finished art to indicate the exact shape, position and size for such elements as half-tones, line sketches, etc.

Alt: Lines on mechanical art that show position of photographs or illustrations.

Key plate: The plate of a set of color plates which carries detail and to which the other plates are registered.

Kilobyte (KB): 1,000 bytes.

Kiss die cut: To cut the top layer of a pressure sensitive sheet and not the backing.

Kiss impression: In printing, a very light impression, just enough to produce an image on the paper.

Kiss register: See *Butt Register*

Knock out: To mask out an image.

Knurled roll: See *Engraved Roll*

Kraft paper: A paper or board containing unbleached wood pulp (brown in color) made by the sulfate process.

Kromecote: A highly polished mirror-like finish on paper.

Laid finish: Simulating the surface of handmade paper.

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

Lacquer stations: Any gravure unit used to apply overprints.

Laid paper: Paper made with a pattern of parallel lines at equal distances, giving a ribbed effect.

Lake: An insoluble compound of a dye colorant. A depression or dishing in the surface of a rubber plate. Flexographic

Lamella: A blade angle etched or ground to a thinner gauge than the base thickness of the blade stock.

Laminant: An adhesive for combining and bonding a combination of films, foils, plastics, papers, or other material in sheet or web form.

Laminate: To cover with film, to bond or glue one surface to another.

Lamination: A plastic film bonded by heat and pressure to a printed sheet for protection or appearance.

Land area: The area of a roller, upon which the doctor blade rides.

Lap: An area where on color overprints another adjacent color, usually held to a fine line, but which can vary considerably depending upon the press equipment and the effect created by overprinting two or more colors.

Laser: The acronym for Light Amplification by Stimulated Emission of Radiation. The laser is an intense light beam with very narrow band width that can produce images by electronic impulses from digital media.

Lateral adjustment: Move blade toward or away from cylinder; also, parallel blade to cylinder.

Layflat: See Eurobind.

Layout: The drawing or sketch of a proposed printed piece. In platemaking, a sheet indicating the settings for a step-and-repeat machine.

Leaders: In composition, rows of dashes or dots to guide the eye across the page. Used in tabular work, programs, tables of contents, etc.

Leading: (Pronounced ledding) The space, measured in points, between consecutive lines of type. (From the strips of lead placed between lines of hot type.)

Ledger paper: A grade of business paper generally used for keeping records where it is subjected to appreciable wear so it requires a high degree of durability and permanence.

Length: The property of an ink whereby it can be stretched out into a long thread without breaking; long inks exhibit good flow characteristics.

Letter spacing: The spacing of letters for proper optical balance. Also adding or subtracting a small amount of space between each letter or character to adjust (justify) the length of a line of copy.

Letterspacing: The place of additional space between each letter of a word.

Leveling action: The ability of a plating solution to produce a surface smoother than the substrate of base metal.

Lightfastness: The resistance of printed or colored material to the action of sunlight or artificial light.

Light reflection: The light, striking an object, which is turned back. The opposite of absorption.

Light stability: A measure of the ability of a pigment, dye, or other colorant to retain its original color and physical properties either alone or when incorporated into plastics, paints, inks and other colored surfaces upon exposure to sun or other light. Ability of a plastic or other organic film or surface to withstand the deteriorating effect of exposure to sun or other light independently of the stability of any pigmentation it contains.

Line copy: High contrast copy not requiring a halftone.

Line cut: Engraving made from line copy.

Line films: Photographic film that converts all tones of gray to just black or white granular solids.

Line growth: The growth of a printed line as a result of pressure between the printing plate and the substrate.

Liner: One of the outer, smooth members of corrugated board.

Lines per inch: The number of rows of dots per inch in a halftone.

Line screen: A number used to express the fineness of a halftone screen, ranging from 25 to 300 or more lines per linear inch. The number refers to the number of dots such a screen is capable of producing in a single row exactly one inch long.

Linetone: A form of halftone composed of lines instead of dots.

Lint: Loose fibers.

Lip of the blade: Wiping edge of a doctor blade.

Lithography: A method of printing from a plane surface (as a smooth stone or metal plate) on which the image to be printed is ink-receptive (hydrophobic) and the non-printing area is ink repellant (hydrophilic). Planography.

Livering: An irreversible increase in the body of inks as a result of gelation or chemical change during storage.

Load: The total weight supported by the force of a roll. It usually is expressed in pounds per linear inch, abbreviated PLI.

Local area network (LAN): In electronic publishing, the linking of workstations, storage units (file servers) and printout

devices (print servers).

Log: A master roll of paper from which finished rolls are slitted, spliced and rewound for shipment to the printer.

Logotype (or logo): The name of a company or product in a special design used as a trademark in advertising.

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

Loupe: A magnifying glass used to review a printed image, plate and position film.

Lower case: Small letters in type, as distinguished from the capital letters.

M: Abbreviation for a quantity of 1000 sheets of paper.

Machine coated: Paper which is coated one- or two-sides on a paper machine.

Machine direction: Same as grain direction in paper.

Machine finish: The finish applied on the paper machine. The finish is commonly referred to as M.F.

Machine glazed: (M.G.) The finish produced in glaze on the wire side of a sheet as it is passed in contact over a single, large diameter, steam-heated cylinder on the Yankee Machine. The finish is commonly referred to as M.G.

Machine set: When type is set by using a keyboard on a machine instead of setting each character by hand into a typestick.

Machine wire: The continuous copper or bronze wire which is the traveling surface upon which the web of paper is formed. I is usually referred to as the "wire".

Magenta: Process red, one of the basic colors in process color.

Magenta screen: a dyed contact screen, used for making half-tones.

Magnetic storage: Any disc, film, tape, drum, or core that is used to store digital information.

Makeover: In platemaking, a plate which is remade.

Makeready: All the activities required to prepare a press for printing.

Makeup: In composition, the arrangement of lines of type and illustrations into sections or pages of proper length.

Mandrel: A shaft upon which cylinders, or other devices, are mounted or affixed.

Manipulation: Adjustment to doctor blade required to get optimum results.
Marginal words: Call outs for directions on various parts of a business form.

Mask: In color separation photography, an intermediate photographic negative or positive used in color correction. In offset lithography, opaque material used to protect open or selected areas of a printing plate during exposure.
Alt: Blocking light from reaching parts of a printing plate.

Masstone: The reflected color of a bulk ink.

Master: A plate for a duplicating machine.

Mat: See matrix.

Matchprint: Trade name for 3M integral color proof.
Alt: A color proofing system developed by 3M.

Matrix: A mold in which type is cast in linecasting machines. In stereotyping, the paper mold or mat made from a type form.

Matte finish: Dull paper or ink finish.

Maximum angle of wipe: Flattest wipe obtainable.

Mealiness: See Snow Flaking, specifically middle tones.

Measure: In composition, the width of type, usually expressed in picas.

Mechanical: A term for a camera-ready pasteup of artwork. It includes type, photos, line art, etc., all on one piece of artboard.

Mechanical pulp: In papermaking, groundwood pulp produced by mechanically grinding logs or wood chips. It is used mainly for newsprint and as an ingredient of base stock for lower grade publication papers.

Mechanical separation: Mechanical art overlay for each color to be printed.

Megabyte (MB): One million bytes.

Menu: In electronic publishing, a method for selecting alternative functions displayed as a list on a workstation screen. Selection via mouse key or sequence of keys.

Metamerism: A condition when colors match under one light source, but do not match under another light source.

Methyl ethyl ketone (MEK): A relatively fast drying organic solvent of the ketone family. Highly flammable. Good solvent for nitrocellulose and vinyl lacquers. Small amounts will swell Buna-N plates, large amounts will swell natural rubber. Boiling point 175 degrees F, flash point 24 degrees F.

Mezzotint: 1) An early copper plate engraving method that created the impression of tonal variation through patterns of dots cut with tools. Used only in fine art engraving. 2) Any of a variety of special effect screens used to convert line art into fine patterns without the use of halftone dots.

Micrometer: Instrument used to measure the thickness of different papers.

Middle tones: The tones in a photograph that are approximately half as dark as the shadow area.

Mileage: The surface area covered by a given quantity of ink or coating material.

Mill roll: Roll of paper, film, or foil as received by converter from mill.

Mineral spirits: Hydrocarbon petroleum distillates having a boiling range of approximately 300-350 degrees F.

Minimum Angle of Wipe: Sharpest (steepest) wipe obtainable.

Misting: A mist or fog of tiny ink droplets thrown off the press by the rollers. Flying.

Moire: In color process printing, the undesirable screen pattern caused by incorrect screen angles of overprinting halftones.

Alt: Occurs when screen angles are wrong causing odd patterns in photographs.

Moisture content: The percentage of water in a finished material such as film or paper, expressed as percent of original weight of the test samples.

Moisture proof: Not affected by moisture. A barrier to moisture; although materials which resist passage of moisture are often called moisture proof, their preferable designation is moisture barrier.

Moisture wrinkle or welt: A paper defect consisting of wrinkles running in the web direction, caused by dry paper acquiring moisture in storage.

Mold: A female form used for the production of desired shapes. To form a matrix or rubber plate. See *Matrix*.

Molding press: A platen press in which matrices or rubber plates are formed.

Montage: In artwork, several photographs combined to form a composite illustration.

Mottle: The spotty or uneven appearance of printing, mostly in solid areas.

Mounting and proofing machine: Device for accurately positioning rubber plates to the plate cylinder and for obtaining proofs for register and impression, off the press.

Mounting: The process of affixing plates on a cylinder or base in proper position to register color to color as well as to the wrapper or bag to be printed.

Mullen tester: A machine for testing the bursting strength of paper.

Multicolor overprinting: The technique of overprinting a given number of transparent colors to produce additional colors without using halftones. Orange, green, purple, and brown may be thus produced by overprinting cyan, magenta and lemon yellow resulting in a total of seven colors from three.

Mylar: A polyester film which exhibits exceptional mechanical strength and dimensional stability. Common substrate used in flexographic film printing.

Naphthas: Aliphatic hydrocarbon solvent derived from petroleum such as hexane, VM&P naphtha, etc. Characterized by low K.B. values. Will swell natural or butyl rubber, have slight effect on Buna-n or Neoprene.

Natural drying time: The amount of time taken from the last printing unit until elevated web temperature begins.

Negative: In photography, film containing an image in which the values of the original are reversed so that the dark areas appear light and vice versa. (See positive)

Alt: The image on film that makes the white areas of originals black and black areas white.

Neoprene: A synthetic chlorinated butadiene rubber used in making flexo-rollers resistant to alcohols, cellosolve, water, aliphatic hydrocarbons and to a limited extent esters (acetates). Not resistant to aromatic hydrocarbons.

Neutral Sodium Sulfite Process: A chemical pulping method adaptable to many tree species and operable with minimal environmental problems.

Newsprint: Paper made mostly from groundwood pulp and small amounts of chemical pulp; used for printing newspapers.

Nip: Line of contact between two Rolls.

Nitrocellulose: A film former widely used in flexographic and gravure inks; nitrated cellulose. See Pyroxylene.

Nodule: A small lump of rounded or irregular shape such as chrome projections on an anilox roll needing additional polishing for removal.

Non-fogging film: Film that does not become cloudy from moisture condensation caused by temperature and humidity changes.

Non-impact printer: An electronic device like a copier, laser or ink-jet printer that creates images on a surface without contacting it.

Non-increment press: A flexographic press capable of printing infinite variable repeats, not dependent on standard gear pitch increments.

Non-reproducing blue: A blue color the camera cannot see. Used in marking up artwork.

Non-scratch: Inks that have high abrasion and mar-resistance when dry.

No-screen exposure: See bump exposure.

Nonvolatile: That portion of a material that does not evaporate at ordinary temperatures.

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 on the shorter dimension.

OCR: Acronym for Optical Character Reader; a device that allows a computer to read printed or written material.

OD: Outside diameter of a part, generally a cylinder or roll. Outside dimensions of a container, package, or part.

Off balance weight: Weight added to the doctor blade by its mechanism.

Off loading: Relieving the intensive amount of data processing associated with a specific application (i.e., graphics) from the CPU, by performing those calculations in a dedicated or specialized processor.

Off-press proofs: Proofs made by photomechanical or digital means in less time and at lower cost than press proofs.

Offset: The transfer of improperly or incompletely dried ink from the face of the print to the back of the stock on top of it in the roll or pile. The accidental transfer of ink from the idler or other rolls in a press to the web.

Offset core: A core in a substrate roll that protrudes from the roll.

Offsetting: See set-off. In printing, the process of using an intermediate blanket cylinder to transfer an image from the image carrier to the substrate. Short for offset lithography.
Alt: Also, an unpleasant happening when the images of freshly printed sheets transfer images to each other.

Offset paper: Term for uncoated book paper.

Offset Printing (Offset Lithography): Commercial printing method, in which ink is offset from the printing plate to a rubber roller then to substrate.

OK Sheet: Final approved color inking sheet before production begins.

Oleophilic: Oil receptive. Literally - loving oil. A term that may be used in food packaging.

Oleophobic: Oil repellant. Literally - hating oil. A term that may be used in food packaging.

Opacity: The amount of show-through on a printed sheet. The more opacity or the thicker the paper the less show-through. (The thicker/heavier the paper the higher the cost.)
Alt: That property of paper which minimizes the show-through of printing from the back side or the next sheet.

Opaque: In photoengraving and offset lithography, to paint out areas on a negative not wanted on the plate. In paper, the property which makes it less transparent.

Opaque ink: Ink that conceals all color beneath it.

Operating side: That side of a flexographic press on which the printing unit adjustments are located; opposite of driving side or gear side.

Optical distortion: Change in appearance of objects viewed through a transparent material adding certain defects such as waviness of surface, etc.

Orange peel: 1) A variety of mottle. 2) A finish resembling the dimpled appearance of an orange peel.

Organic: Refers to the compounds, in the field of chemistry, containing carbon.

Organosol: A suspension of particles in an organic solvent, usually made with vinyl resins, solvents, and plasticizers.

Orthochromatic: Photographic surfaces insensitive to red, but sensitive to ultraviolet, blue, green and yellow rays.

Oscillation: Side-to-side motion of the doctor blade mechanism over the cylinder.

Outline halftone: Removing the background of a picture or silhouetting an image in a picture.

Overhang cover: A cover larger in size than the page it encloses.

Overlay: In artwork, a transparent covering over the copy where color break, instructions or corrections are marked. Also, transparent or translucent prints which, when place one on the other, form a composite picture.
Alt: The transparent cover sheet on artwork often used for instructions.

Overprinting: Double printing; printing over an area that already has been printed.

Overrun or overs: In printing, copies printed in excess of the specified quantity. (Printing trade terms allow for +/- 10% to represent a completed order.)

Overtone: The modifying hue or tone of a color.

Overwrap: A wrapper applied around a product, package, carton, box, etc.

Packing: In printing presses, paper used to underlay the image or impression cylinder in letterpress, the plate or blanket in lithography, to get proper squeeze or pressure for printing.

Page buffering: The ability to spool an entire image to disk and print in a continuous motion.

Page count: Total number of pages in a book including blanks.

Page description language: In computer imaging, a method for communicating page, font and graphic information from the work station to the printout device.

Page makeup: In stripping, assembly of all elements to make up a page. In computerized typesetting and CEPS, the electronic assembly of page elements to compose a complete page with all elements in place on a video display terminal and on film or plate.

Pagination: In computerized typesetting, the process of performing page makeup automatically.

Palette: The collection of colors or shade available to a graphic system or program.

Panchromatic: Photographic film sensitive to all visible colors.

Paper master: A paper printing plate used on an offset-duplicator. The image is made by hand drawing, typewriter, or electrophotography.

Paste drier: In ink making, a type of drier, usually a combination of drying compounds.

Pasteup: See mechanical.

Pattern carbon: Special carbon paper used in business forms that only transfers in certain areas.

Pattern plate: The engraving or combination of plates used for making the matrices from which rubber plates are made.

PDF (Portable Document File): A proprietary format developed by Adobe Systems for the transfer of designs across multiple computer platforms.

Penetration: The ability of a liquid (ink, varnish, or solvent) to be absorbed into a substrate.

Perfect bind: A type of binding that glues the edge of sheets to a cover like a telephone book, software manuals, or magazines.
Perfecting press: A sheet fed printing press that prints both sides of a sheet in one pass.

Perforated tapes: Paper tape that is perforated when used on a computer typesetter. The perforated tape can be used to expose the wanted type copy and for future recall just like a floppy disc.

pH: A 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, above 7 are alkaline.

Phenolic: Generic name for phenol-formaldehyde plastic.

Photo CD: A proprietary format developed by Eastman Kodak for storing photographic images on a compact disc. Images can be easily accesses for use in professional printing.

Photo composition: Process of setting type copy photographically, as opposed to using the method of inking and proofing lead type characters.

Photconductor: Materials used in electrophotography that are light sensitive when charged by corona.

Photo Copy: A mechanical printing process that uses a light sensitive printing element, magnetic toner and a heating element to fuse the toner to the paper.

Photoengraving: A metal plate prepared by the photochemical process, from which the matrix or rubber mold is reproduced.

Photograph: An image or picture made by exposing light sensitive film with a camera.

Photo illustration: An image, primarily consisting of a photograph or composite image containing a photograph.

Photomechanical: Pertaining to any platemaking process using photographic negatives or positives exposed onto plates or cylinders covered with photosensitive coatings.

Photo plate: A light sensitive printing plate. The plate is developed like film, and then used on a printing press.

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: A photographic reproduction on paper. Photostats may be positive or negative.

Phototypesetting: The method of setting type photographically.

Pica: Printers unit of measure in typesetting. One pica = 1/6 inch.

Picking: Printers nightmare that occurs as the surface of a sheet lifts off during printing. Generally a paper manufacturer's quality control problem.

Alt: The lifting of the paper surface during printing. It occurs when pulling force (tack) of ink is greater than surface strength of paper. Transfers from the substrate web to a roller - gravure.

Pigment: In printing inks, the fine solid particles used to give color, transparency or opacity.

Piling: In printing, the building up or caking of ink on rollers, plate or blanket; will not transfer readily. Also, the accumulation of paper dust or coating on the blanket of offset press.

Pin register: The use of accurately positioned holes and special pins on copy, film plates and presses to insure proper register or fit of colors.

Alt: A standard used to fit film to film and film to plates and plates to press to assure the proper registrations of printer colors.

Pinholing: Failure of a printed ink to form a complete continuous film. Visible in the form of small holes in the printed area.

Pitch diameter: The measurement of a gear or plate cylinder, determined by dividing the pitch line (or circumference) by Pi.

Pitch line: An imaginary circle on the gear, roughly at the point of mesh with the mating gear. Determines the "repeat" of the gear. Also equal to the printing repeat of the cylinder.

PIV: Pulsating Invariable Variator. A speed variator control is applicable to various types of equipment, with various specific functions. On printing press it synchronizes line speed of press (gear speed) or draw. Rolls with that or the moving eb.

Pixel: In electronic imaging, a basic unit of digital imaging.

Pixel depth: The amount of data used to describe each colored dot on the computer screen, i.e. Monochrome is 1 bit deep, Greyscale is 8 bits deep, RGB is 24 bits deep. Images to be printed as CMYK separation should be 32 bits deep.

Plasticizers: Liquid or solid additives used to impart flexibility to a dry ink film or overprint varnish.

Plastisol: A suspension of particles in an organic liquid, similar to an organosol, but containing no solvents.

Plate cylinder: The cylinder of a press on which the plate is mounted.

Plate gap: Gripper space. The area where the grippers hold the sheet as it passes through the press.

Plate ready film: Final photographic film used to "burn" printing plates.

Platen: The heated plates of a printing plate vulcanizer, which press the engraving into the matrix or matrix into the rubber during the plate making process. Also the heated plate on a flat bed transfer printing press, which press the heat transfer paper onto the fabric to produce the finished design.

Ply: Each layer in a multi-layered structure.

PMS: The abbreviated name of the Pantone Color Matching System.
Alt: A proprietary color system for choosing and matching specific spot and process colors

PMT: The abbreviated name for photomechanical transfer. Often used to make position prints.

Point: For paper, a unit of thickness equaling 1/1000 inch. For typesetting, a unit of height equalling 1/72 inch.
Alt: Normally used to measure type size or fractions of a pica for the design process.

Polar solvents: Solvents with oxygen in their molecule, such as water, alcohols, esters and ketones.

Polyamides: Polymers containing amide groups. For example: Nylon, Versamid Resins, etc.

Polyethylene: A synthetic resin of high molecular weight resulting from the polymerization of ethylene gas under pressure.

Polymer: A compound formed by the linking of simple and identical molecules having functional groups that permit their combination to proceed to higher molecular weights under suitable conditions.

Polymerization: A chemical reaction in which the molecules of a monomer are linked together to from large molecules whose weight is a multiple of that of the original substance.

Polypropylene: A synthetic resin of high molecular weight resulting from the polymerization of propylene gas.

Polystyrene: a thermoplastic material derived from the polymerization of styrene.

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

Position proof: Color proof for checking position, layout and/or color breakout of image elements.

Positive: In photography, film containing an image in which the dark and light values are the same as the original. The reverse of negative.

PostScript: The computer language most recognized by printing devices.

Premakeready: In flexography, process by which surface of printing plates is varied in height for better printability before going on press.

Pre-Press: The various printing related services, performed before ink is actually put on the printing press(i.e. scanning, color separating, etc.)

Pre-press proofs: See off-press proofs.

Presensitized plate: In photomechanics, a metal or paper plate that has been precoated with a light-sensitive coating.

Preseparated art: Artwork in which the basic layout, register marks and major color is prepared on illustration board and each additional color plate is drawn on a separate sheet or film overlay.

Press number: A method of numbering manufacturing business forms or ticks.

Press proof: In color reproduction, an approved copy or version of the final image to be printed, to be used as reference while printing.

Pressure-sensitive paper: Paper material with self-sticking adhesive covered by a backing sheet.

Primary colors: See additive primaries, subtractive primaries.

Prime coat: Base coat applied first to enhance subsequent printing.

Printability: The ability of a paper or substrate to produce an acceptable printed image, as distinguished from runnability, which deals only with the paper's ability to pass mechanically through the press.

Print quality: A term describing the visual impression of a printed piece. In paper, the properties of the paper that affect its appearance and the quality of reproduction.

Printing: The process of applying ink to substrate.

Process control: That procedure for examining a process, which aims at evaluating future performance through the use of statistical quality control methods.
Process blue: The blue or cyan color in process printing.

Process colors: Cyan (blue), magenta (process red), yellow (process yellow), black (process black).

Process inks: For high reproduction illustrations by halftone color separation process. Colors are: yellow, magenta, cyan, with or without black.

Process lens: A highly corrected photographic lens with a flat field for graphic arts line, halftone and color photography.

Process printing: The printing from a series of two or more halftone plates to produce intermediate colors and shades.

Production artist (pasteup artist): A skilled laborer who produces finished camera ready or plate ready artwork from the visual elements and instructions provided by the designer or client.

Production run: The final printing requested by the customer from the original artwork.

Progressive proofs (progs): Proofs made from the separate plates in color process work, showing the sequence of printing and the result after each additional color has been applied.

Proofing: The stage of making a number of trial prints to judge the final result prior to editioning.

Psychrometer: A wet-and-dry bulb type of hygrometer. Considered the most accurate of the instruments practical for industrial plant used for determining relative humidity.

Ragged left: In typesetting, type that is justified to the right margin and the line lengths vary on the left.

Ragged right: In typesetting, type that is justified to the left margin and the line lengths vary on the right.

Railroading: Printing of a continuous mark or line on the non-image areas of a design, often resulting in the marking or scratching of a cylinder. Can be caused by particles lodged behind the doctor blade.

Railroad tracks: A streak developed by oscillation of a nicked doctor blade, resulting in a heavy, wide line printed on the we at the ends of the stroke, with fine lines running in between.

Ream: Five hundred sheets of paper.

Recto: Right-hand page of an open book.

Reducers: In printing inks, varnishes, solvents, oily or greasy compounds used to reduce the consistency for printing. In photography, chemicals used to reduced the density of negative or positive images or the size of halftone dots (dot etching)

Alt: Copy that is not transparent.

Reflection copy: In photography, illustrative copy that is viewed and must be photographed by light reflected from its surface. Examples are photographs, drawings, etc.

Reflective process camera: A camera that is capable of reproducing an original image that has been prepared on an opaque substrate.

Register: In printing, fitting of two or more printing images in exact alignment with each other.

Alt: To position print in the proper position in relation to the edge of the sheet and to other printing on the same sheet.

Register marks: Crosses or other targets applied to original copy prior to photography. Used for positioning films in register, or for register of two or more colors in process printing.

Alt: Cross-hair lines or marks on film, plates, and paper that guide strippers, platemakers, pressmen, and bindery personnel in processing a print order from start to finish.

Registration: The quality of alignment of the different colored inks as they are applied to paper. (i.e. If the inks can be seen to overlap improperly or to leave white gaps on the page, the printing is said to be "out of registration" or "poor register".)

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.

Repeat: The printing length of a plate cylinder determined by one revolution of the plate cylinder gear.

Repeatability: The ability to keep photo film and the images thereon in proper register. Repeatability is usually measured in micrometers.

Reprography: Copying and duplicating.

Resin: A complex organic substance that, in solvent solution, forms the gravure varnish; after drying, resins become the binder, or film-forming materials.

Resist: In photomechanics, a light-hardened stencil to prevent etching of non-printing areas on plates.

Resolution: In electronic imaging, the quantification of printout quality using the number of spots per inch.

Respi screen: A contact screen with 110-line screen ruling in the highlights and 220-line in the middle tones and shadows to produce a longer scale and smoother gradation of tones in the light areas of the copy.

Retarder: Solvents added to ink to slow the evaporation rate.

Retrofit: Backwards integration of advanced capability into a device or program not originally intended for that purpose.

Reverse: The opposite of what you see. Printing the background of an image. For example; type your name on a piece of paper. The reverse would be a black piece of paper with a white name.

Reverse angle doctor blade: In flexography, similar to doctor blade in gravure except used with much lighter pressure and a reverse angle on the anilox roll.

Reverse printing: Printing on the underside of a transparent film. Design in which the copy is "dropped out" and the background is printed.

Rewound: After the desired substrate has been printed it is taped to a shaft and wound back into the original unprinted

roll form.

RGB: Red, Green, Blue - additive primary colors.

Rhodamine reds: A class of clean, blue shade organic reds possessing good light fastness often called magenta in process printing.

Right-angle fold: In binding, a term used for two or more folds that are at 90 degree angles to each other.

Rip film: A method of making printing negatives from PostScript files created by desktop publishing.

Rollout: Ink spread for testing or sampling purposes by using a hand-roller.

Roller stripping: In lithography, a term denoting that the ink does not adhere to the metal ink rollers on a press.

Roto News: Any of five grades of uncoated groundwood manufactured expressly for gravure printing.

Rub-proof: In printing, ink that has reach maximum dryness and does not mar with normal abrasion.

Rub test: See abrasion test.

Rubber: An elastomer material that is capable of recovering from large deformations quickly and forcibly.

Rubylith: A hand cut masking film used in screen and flexographic printing.

Run-around: In composition, the term describing type set to fit around a picture or other element of the design.

Runnability: Paper properties that affect the ability of the paper to run on the press.
Alt: The physical ability of a roll of paper or substrate to pass through a press under prevailing conditions of tension and speed without web breaks. Distinguished from printability.

Running head: A headline or title repeated at the top of each page.

Running In: The process of seating a doctor blade to a cylinder. Also called toning in.

Running register: That control on a flexographic press, which accurately positions the printing of each color station, in the direction of the web travel. Also called Circumferential register and Longitudinal register.

Saddle stitch: Bind a booklet or magazines with staples in the seam where it folds.
Alt: Saddle wire: In binding, to baste a booklet by wiring it through the middle fold of the sheets.

Safelight: In photography, the special darkroom lamp used for illumination without fogging sensitized materials.

Sans Serif: A typeface that has not tails or curled points (serifs) at the ends.

Scale: A defect in coated papers consisting of slightly colored reflective spots, caused by dry coating material embedded in the paper during calendaring.

Scan-a-web: In web printing, a rotating mirror arrangement where speed can be varied to match speed of press so image on paper can be examined during printing.

Scanner: An electronic device used to make color separations, halftones, duo tones and tri tones. Also a device used to scan art, pictures or drawings in desktop publishing.

Scaling: Determining the proper size of an image to be reduced or enlarged to fit an area.

Score: A crease put on paper to help it fold better. It is preferable to score heavy paper before folding it, in order to avoid cracking.
Alt: To impress or indent a mark with a string or rule in the paper to make folding easier.

Scratchboards: Plain white coated boards which may be covered with India Ink or some other black coating and on which a drawing is executed by scratching through the ink and exposing white lines or areas using a scratchboard tool.

Screen: See contact screen.

Screen angles: In color reproduction, angles at which the halftone screens are placed in relation to one another, to avoid undesirable moiré patterns. A set of angles often used is: black 45E, magenta 75E, yellow 90E, cyan 105E.

Alt: Frequently a desktop publisher's nightmare. The angles at which halftone, duo tones, tri tones, and color separation printing films are placed to make them look right.

Screen-printing: In flexography, refers to any tone printing work, whether half-tone or Ben Day.

Screened print: In photography, a print with a halftone screen made from a halftone negative or by diffusion transfer.

Screen ruling: The number of lines or dots per inch on a halftone screen.

Screen sizes: Designated by the number of half tone dots in one linear inch of perpendicular or horizontal ruling.

Scribe lines: The fine lines on the surface of the plate cylinder in an evenly spaced horizontal and vertical position to aid in mounting rubber plates accurately. Center lines or other positioning guide lines applied to the non-printing areas of a rubber printing plate, to facilitate mounting on a cylinder.

Script: A typeface that mimics the appearance of hand written text.

Scuff: The action of rubbing again with applied pressure. The damage that has taken place through a rubbing.

Scumming: A deposit on ink on the non-printing areas of a gravure cylinder often leaving a residual haze over a large area of web.

Sealing solvent: A method of adhering packaging materials which depends on the use of small amounts of a volatile organic liquid to soften the coating or surface of the material to the point where the materials will adhere when the solvent evaporates.

Secondary colors: Those obtained by mixing any two of the primary colors in equal proportions.

Self cover: A cover of the same paper as inside text pages.

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

Separations: A set of three or four continuous tone or halftone negatives made by color filter exposures from a full color film transparency, photographic print or painting. Each negative represents one of the printer colors abstracted. They are used to make printing plates in color process printing.

Serif: The curls and points that appear as adornments on some type faces.

Service bureau: The facility that provides professional services to graphics and printing professionals. (i.e. plate ready film, matchprints, color keys, etc..)

Set: The strain remaining after complete release of a load producing the deformation in rubber.

Set-off: In presswork, when the ink of a printed sheet rubs off or marks the next sheet as it is being delivered. Also called offset.

Shade: A color produced by a pigment or dye having some black mixed in it, therefore darkening it. Opposite of tint.

Shading: The addition of a color, shade or tone to suggest three-dimensionality, shadow or diminished light in a picture or design.

Shadow: The darkest areas of a photograph.

Sharp wipe: The resultant angle of the doctor blade to the cylinder as the doctor blade angle is decreased. Also referred to as *Steep Wipe*.

Sharpen: To decrease in color strength, as when halftone dots become smaller; opposite of *dot spread* or *dot gain*.

Sheetwise: To print one side of a sheet of paper with one plate, then turn the sheet over and print the other side with another plate using same gripper and opposite side guide.

Shell cup: A device for measuring viscosity.

Shellac: An alcohol-soluble natural resin widely used in flexographic inks.

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

Show-through: In printing, the undesirable condition in which the printing on the reverse side of a sheet can be seen through the sheet under normal lighting conditions.
Alt: Printing on one side of a sheet that can be seen on the other side of the sheet.

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: Binding by stapling along one side of a sheet.

Side register: The control of print register on the horizontal axis, i.e., from one edge of the web to the other.

Side weld: In bag making, refers to the seal formed by a hot knife cutting through two layers of thermoplastic material, like polyethylene, and sealing that edge.

Side wire: In binding, to wire the sheets or signatures of a magazine or booklet on the side near the backbone.

Signature: A sheet of printed paper which when folded becomes a part of a book or publication.
Alt: In printing and binding, the name given to a printed sheet after it has been folded.

Silhouette halftone: A term used for an outline halftone.
Alt: A halftone with all of the background removed.

Sizing: The treatment of paper that gives it resistance to the penetration of liquids (particularly water) or vapors.
Alt: Resins, starches or other compounds added to paper to increase its resistance to penetration of by ink and water. Paper with little sizing, such as newsprint, is called *slack-sized*; *heavily sized* papers such as bond and ledger are called hard-sized. Sizing may be mixed in the pulp or applied to the surface of a partially dry web (surfaces sized).

Skid: A pallet used for a pile of cut sheets.

Skirt: That portion of a bag between the bottom seal and the bottom edge of the bag.

Slime hole: A paper defect caused by bacteria or fungus, which replace or impose themselves upon paper fibers.

Slip compound: An additive for ink that imparts lubricating qualities to the dried ink film.

Slip sheet: A separator between sheets of film, foil, paper, board, etc. to prevent blocking and to facilitate removal of sheets singly.

Slipped core: A paper defect in which the paper in a roll is not properly glued to the core.

Slit: To cut rolls of stock to specified widths. Either rotary or stationary knives or blades are used with mechanical unwinding and rewinding devices.

Slitting: Cutting printed sheets or webs into two or more sections by means of cutting wheels on a press or folder.

Slitter: A machine to cut roll stock in the long direction. Three types are widely used. a. Razor blade slitter b. Sheer slitter c. Score cutter.

Slitter turnover: An edge break on a roll of paper caused by a slitter, which turns over during winding. The edge of the break protrudes from the roll.

Slug: A rubber plate section, usually type, used as an insert.

Slug hole: A paper defect resulting from the paper machine picking out a group of fibers superimposed over the sheet.

Slur: A condition caused by slippage at the moment of impression between any two of the following: substrate, plate, blanket.

Slur stick: A small, specially designed stick of wood or other soft material used to dislodge foreign particles from the edge of a doctor blade.

Slurry: A suspensions of solids in water.

Smoothness: A physical characteristic of paper describing its levelness or flatness, essential for total contact with the gravure cylinder.

Snap: The action of the mesh continually lifting away from the paper during printing.

Snowflaking: Condition of a printed area characterized by very small dots of unprinted areas showing throughout a deposited ink.

Soft end: A paper defect caused by web thickness variation - one part of the roll feels soft compared with an adjacent end.

Soft ink: Descriptive of the consistency of paste inks.

Soft proof: See *hard proof*.

Softening point: Temperature at which plastic material will start to deform with no externally applied load.

Solids content: The percentage of non-volatile matter of which a compound or mixture is composed, based on weight of the entire mixture.

Solid loading: The spring or hydraulic or pneumatic cylinder in a press. When completely compressed, it causes the loading to become direct.

Solids content: The percentage of solid material contained in an ink formulation; includes pigment, extender, binder, plasticizers and wax.

Solvent: Liquid which dissolves a solid. In ink, the evaporation of solvent leaves the solids behind as an ink film on the substrate.

Solvent coating: A type of coating, applied in liquid form, which dries by evaporation.

Solvent load: The maximum rate of solvents to be evaporated in a dryer or solvent recovery system.

Solvent release: In ink, the ability of a binder to influence the rate of evaporation of a solvent.

Souring: The precipitation or coagulation of the ingredients of an ink due to the presence of water or other foreign materials.

SPC: Acronym for statistical process control.

Specifications: A precise description of a print order.

Spectrophotometer: The most sophisticated instrument for measuring brightness and color, able to test at varying wavelengths.

Spectrum: The complete range of colors in the rainbow from short wavelengths (blue) to long wavelengths (red).

Specular gloss test: A means of measuring paper or ink gloss by determining the amount of light reflected from a sample at specified angles.

Spine: The binding edge of a book or publication. Also *see backbone*.

Spiral binding: A book bound with wires in spiral form inserted through holes punched along the binding side.

Split fountain: Putting more than one ink in a printing fountain to achieve special color affects.

Splitting: See flying. Misting.

Splice: The joining of the ends of rolled material.

Spoilage: Planned paper waste for all printing operations.

Spot color: Single colors applied to printing when process color is not necessary (i.e. one, two and three color printing), or when process colors need to be augmented (i.e. a fluorescent pink headline or a metallic tint).

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

Spread 1): A design that encompasses two or more facing pages (i.e. the center spread in the morning newspaper).
2): Literally, spreading the ink around a colored object so that there is no gap between it and the next colored object. (i.e. yellow text on a blue background)

Stabilizer: Chemical used to stop the developed photographic image from continuing to develop.

Stable overlays: A transparent sheet of material used as part of the finished art that will not stretch or shrink.

Stack press: Flexographic press where the printing stations are placed one above the other, each with its own impression cylinder.

Staging: See *stopping out*.

Staining: When two different color inks touch or overlap each other they create a third color referred to as a stain.

Stamping: Term for foil stamping.

Starred roll: A paper roll exhibiting a "starred" visual effect on the end of the roll, caused by uneven winding-causes fluctuations in reel tension during press runs.

Static eliminator: A device for neutralizing static electricity.

Static neutralizer: In printing presses, an attachment designed to remove the static electricity from the paper to avoid ink set-off and trouble with feeding the paper.

Step-and-repeat: A procedure for placing the same image on plates in multiple places.
Alt: In photomechanics, the procedure of multiple exposure using the same image by stepping it in position according to a predetermined layout or program.

Stereotype: Duplicate relief plate used for newspaper printing.

Stet: A proof mark meaning let the original copy stand.

Stickyback: Double faced adhesive coated material used for mounting elastomeric printing plates to the plate cylinder (flexo).

Stippling: Art work in which a series of miscellaneous and usually random dots are used instead of lines.

Stochastic screening: A digital screen process that converts images into very small dots (14-40 microns) of equal size and variable spacing. Second order screened images have variable size dots and variable spacing. Also called Frequency Modulated (FM) screening.

Stock: The material to be printed.

Stopping out: In photomechanics, application of opaque to photographic negatives; application of special lacquer to

protect areas on films in dot etching; staging of halftone plates during relief etching.

Streaking: Not wiping clean, leaving stripes or lines of color on web.

Strength: Usually refers to intensity of a color of ink.

Stretch: Intensity of color of flexographic ink.

Stretch/shrink factors: Calculations of dimensional change that occur in rubber plate molding and mounting and photopolymer plate mounting when applied to the flexo plate cylinder.

Striation: A fine streaky pattern of parallel lines, usually in the direction of the web. flexo, gravure.

Strike through: Penetration of ink through the web. Flexo and gravure.

Stringiness: The property of an ink to draw into filaments or threads.

Striping: A printing imperfection observed when the printed copy becomes alternately more and less intense across the web.

Stripped: When separate pieces of film are taped together to create the complete printing image.

Strike-on composition: Type set by a direct-impression method, or on typewriter composing machines. Also known as cold type.

Stripping: In lithography, the positioning of negatives (or positives) on a flat to compose a page or layout for platemaking.
Alt: The positioning of film on a flat prior to platemaking.

Stroke of Oscillation: The distance the doctor blade oscillates.

Style sheet: A page or group of pages designating the type faces to be used in a design. i.e. Headlines, captions and body text.

Stylus: A hard pointed pen shaped instrument used in marking, writing, incising, tracing, etc.

Sublimable dyes: Dyes that have the capacity to move from a solid state to gas and back to a solid without passing through a liquid phase.

Sublimation: The process in chemistry whereby a solid is volatilized by heat and then converted back into a solid without passing through a liquid phase.

Substance: The weight in pounds of a ream (either 480 or 500 sheets) of paper cut to a given size.

Substance weight: A term of basis weight when referring to bond papers.

Substrate: Any surface on which printing is done.

Subtractive primaries: Yellow, magenta and cyan, the hues used for process color printing inks.

Sulphate process: The chemical pulping method(s) employing caustic soda and sodium sulfide as reagents to break down wood into free fiber. Called sulfate because the sodium salt introduced is sodium sulfate. Sulfate pulps are also called Kraft.

Sulphate pulp: Paper pulp made from wood chips cooked under pressure in a solution of caustic soda and sodium sulphide. Known as kraft paper.

Sulphite process: Any of several chemical pulping methods employing bisulfites of calcium, ammonia, magnesium or sodium. Bisulfites in solution with water create sulfurous acid, the active ingredient in this process.

Sulphite pulp: Paper pulp made from wood chips cooked under pressure in a solution of bisulfite of lime.

Supercalendar: In papermaking, a calendar stack, separate from the papermaking machine, with alternate metal and

resilient rolls, used to produce a high finish on paper.

Alt: A special calendaring process employing chilled iron rolls and cotton-filled rolls in combination with a steam shower to increase density, smoothness and gloss.

Supercalendared Roto News: The highest grade of Roto News paper, also known as Type A.

Surface-sized: See *sizing*.

Surface tension: The tendency of a liquid surface to contract rather than flow out.

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

Swatch: A small piece of material cut for a sample.

SWOP: Acronym for Specifications for Web Offset Publications.

Tack: In printing inks, the property of cohesion between particles; the separation force of ink needed for proper transfer and trapping on multicolor presses. A tacky ink has high separation forces and can cause surface picking or splitting of weak papers.

Tackoscope: See *inkometer*.

Tagged image file format (TIFF): A file format for exchanging bitmapped images (usually scans) between applications.

Taper: To become progressively smaller in thickness, diameter, or width as in a cylinder or roll.

Tearing bond: A type of bond in which it is necessary to tear fibers of one or the other adhered sheets in order to separate them while at the same time there is no failure in adhesion or cohesion of the adhesive.

Tear strip: A narrow ribbon of film, cord, etc, usually incorporated mechanically in wrapper or overwrap during the wrapping operation to facilitate opening of the package.

Telescoping: Transverse slipping of successive winds of a roll of material so that the edge is conical rather than flat.

Tensile strength: The maximum load in tension that a material can withstand without failure.

Terabyte(TB): One trillion bytes.

Text: The body matter of a page or book, as distinguished from the headings.

Text paper: Grades of uncoated paper with textured surfaces.

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 printers: These printers use a transfer sheet that carries ink in contact with the paper or transparency, and a heated printhead

Thermography: A printing process that results in raised type similar to engraved printing.

Thermo-mechanical pulp: In papermaking, made by steaming wood chips prior to and during refining, producing higher yield and stronger pulp than regular groundwood.

Thinners: Liquids, solvents and/or diluents, added to fountain ink for the purpose of reducing the viscosity of the ink.

Thixotropy: The property of a liquid or plastic material that involves a reversible decrease of viscosity as the material is agitated or worked.

Thread: In a press or coating machine, initial passage of a web between the various rollers or other parts of the machine.

Throwing: See flying.

TIFF: See Tagged Image File Format.

Tinctorial strength: The relative ability of a pigment or dye to impart color value to a printing ink.

Tints: A shade of single color or combined colors.
Alt: 1) A color of very low strength or intensity, usually made by adding a small amount of color ink or toner to a large amount of extender or opaque white. 2) A lighter shade of ink created by printing a finer dot pattern, but using full strength ink. A wide gamut of hundreds of shades can be created by surprinting tints of the process colors.

Tissue overlay: Usually a thin transparent paper placed over artwork for protection uses for making color breaks and other printer instructions.

Tolerances: The specification of acceptable variations in register, density, dot size, plate or paper thickness, concentration of chemicals and other printing parameters.

Toner: Imaging material used in electrophotography and some off-press proofing systems. In inks, dye used to tone printing inks, especially black.
Alt: 1) A highly concentrated pigment and/or dye used to modify the hue or color strength of an ink. 2) Black and colored electrostatic imaging materials used in xerographic copiers and in toner-based proofing systems.

Tooth: A characteristic of paper, slightly rough finish, which permits it to take ink readily.
Alt: In screen printing, an action to roughen the surface of the screen prior to adhering a photo stencil.

Transfer roll: Plain roll rotating in contact with another plain roll transferring variable amounts of ink in an inking system.

Transfer screens: Halftone screens of different sizes that can be transferred from its original carrier sheet to the artwork by rubbing it with a stylus.

Transfer sheets: Carrier sheets of type characters, design elements, or halftone screens that will release the image when pressure is applied.

Transfer tape: A peel and stick tape used in business forms.

Transfer type: Type characters of different sizes and styles that can be transferred from its original carrier sheet to the artwork by rubbing it with a stylus.

Transparency: A positive photographic slide on film allowing light to pass through.

Transparent copy: A film that light must pass through for it to be seen or reproduced.
Alt: In photography, illustrative copy such as a color transparency or positive film through which light must pass in order for it to be seen or reproduced.

Transparent ink: A printing ink that does not conceal the color under it. Process inks are transparent so that the will blend to form other colors.

Trapping: In printing, the ability to print a wet ink film over previously printed ink. Dry trapping is printing wet ink over dry ink. Wet trapping is printing wet ink over previously printed wet ink. In prepress, refers to how much overprinting colors overlap to eliminate white lines between colors in printing.
Alt: The process of closing gas between different color inks as they appear on the printed page. Trapping color is achieved by use of chokes and spreads.

Trim marks: In printing, marks placed on the copy to indicate the edge of the page.
Alt: Similar to crop or register marks. These marks show where to trim the printed sheet.

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

Tunnel: The compartment through which the web passes for final drying after printing.

Turning bars: An arrangement of stationary bars on a flexo press, which guide the web in such a manner that it is turned front to back, and will be printed on the reverse side by the printing units located subsequent to the turning bars.

Twin-wire machine: In papermaking, a four-denier paper machine with two wires instead of one producing paper with less two-sidedness.

Two-sheet detector: In printing presses, a device for stopping or tripping the press when more than one sheet attempts to feed into the grippers.

Two-sidedness: In paper, the property denoting difference in appearance and printability between its top (felt) and wire sides).

Type gauge: In composition, a printer's tool calibrated in picas and points used for type measurement.

Typography: The style, arrangement or appearance of typeset matter. The art of selecting and arranging typefaces.

UCA: Acronym for Under Color Addition.

UCR: Acronym for Under Color Removal- In process multicolor printing, color separation films are reduced in color in neutral areas where all three colors overprint and the black film is increased an equivalent amount in these areas. This improves trapping and can reduce makeready and ink costs.

Unbalance: The uneven distribution of weight or forces in a roll. In flexo there are two recognized types of unbalance: Static and Dynamic.

Undercut: In printing presses the difference between the radius of the cylinder bearers and the cylinder body , to allow for plate (or blanket) and packing thickness.

Under-run: Production of fewer copies than ordered. See over run.

Undistorted artwork: Artwork that has been prepared without compensation for the distortion that takes place after the printing plate has been mounted on the printing cylinder.

Unit: In multicolor presses, refers to the combination of inking, plate and impression operations to print each color. A 4-color press has 4 printing units each with its own inking, plate and impression functions.

Up: Printing two (...three, four, etc) up means printing multiple copies of the same image on the same sheet.

UV coating: Liquid laminate bonded and cured with ultraviolet light.

UV ink: Solventless ink that is cured by UV radiation.

Vacuum back: The top or back of a process camera with a vacuum that can be used to hold the photographic paper or film in place during exposure.

Vacuum forming: The process of heating a plastic until it is soft, placing it over a mold and then molding it to form by means of a vacuum.

Vacuum frame: In platemaking, a vacuum device for holding copy and reproduction material in contact during exposure.

Varnish: A thin, protective coating applied to a printed sheet for protection or appearance. Also, in ink making, it can be all or part of the ink vehicle.

Alt: A clear liquid applied to printed surfaces for looks and protection. (UV coating looks better.)

Vehicle: In printing inks, the fluid component which acts as a carrier for pigment.

Vellum: High quality translucent paper used for tracing.

Vellum finish: In papermaking, a toothy finish which is relatively absorbent for fast ink penetration.

Velox: A black and white photographic print of very good quality that can be used as part of the artwork and later reproduced for printing plates.

Verso: The left hand page of an open book.

Verticle adjustment: A method of analysis that depends upon measurement of the volume of standard solution consumed in a titration.

Vignette halftone: An illustration in which the background fades gradually away until it blends into the unprinted paper.
Alt: A halftone whose background gradually fades to white.

Vinyl: Informal generic term for any of the vinyl resins, or for film, or other products made from them.

Vinyl plastics: Plastics based on resins made from vinyl monomers, except those specifically covered by other classifications such as acrylic and styrene plastics. Typical vinyl plastics are polyvinyl chloride, polyvinyl acetate, polyvinyl alcohol, and polyvinyl butyryl, and copolymers of vinyl monomers and unsaturated compounds.

Viscosimeter: Instrument used to measure the viscosity of ink, varnish, or other solution.

Viscosity: Resistance to flow.

Vulcanization: A curing process in which the physical properties of a rubber are changed.

Warm color: In printing, a color with a yellowish or reddish cast.

Washup: Removing printing ink from a press, washing the rollers and blanket. Certain ink colors require multiple washups to avoid ink and chemical contamination.

Water break: The appearance of a discontinuous film of water on a surface signifying nonuniform wetting and usually associated with surface contamination.

Waterless printing: In offset, printing on a press using special waterless plates and no dampening system.

Watermark: Translucent mark made in paper while it is still wet for purposes of identification.

Waste: A term for planned spoilage.

Watermark: A distinctive design created in paper at the time of manufacture that can be easily seen by holding the paper up to a light.

Wear in (seat): Break in a rotating doctor blade by applying pressure against cylinder without printing to wear in the blade.

Web: A roll of printing paper used in web or rotary printing.

Web guide: Device that keeps the web traveling straight or true through the press.

Web press: The name of a type of presses that print from rolls of paper.
Alt: A high speed printing press that prints on both sides of a continuous roll of paper. Web presses are used for high volume printing such as newspapers and magazines.

Web strength: A measure of the physical strength properties of paper when saturated with water, expresses in terms of wet tensile-strength, wet bursting-strength, etc.

Web tension: The amount of pull or tension applied in the direction of travel of a web of paper by the action of a web press.

Wetting: Surrounding minute particles of pigment with resin solutions during ink-making.

Wetting agent: A substance that reduces the surface tension of a liquid, thereby causing it to spread more readily on a solid surface.

Whip: See bounce.

Whiskers: Hairy edges of shadow areas due to static electricity.

Widow: In composition, a single word in a line by itself, ending a paragraph, or starting a page, frowned upon in good

typography.

Winder Wrinkles: A paper defect caused by a hard spot on the winder reel.

Winding: The process of transferring paper from the master machine roll to rolls suitable for use on a press. Also called rewinding.

Wire mark: The impression left in a web of paper by the wire of a four-denier machine.

Wire O: A bindery trade name for mechanical binding using double loops of wire through a hole.

Wire-O binding: A method of wire binding books along the binding edge that will allow the book to lay flat using double loops. See Wire O.

With the grain: Folding or feeding paper into the press or folder parallel to the grain of the paper.

Woodcut: An illustration in lines of varying thickness, cut in relief on plank-grain wood, for the purpose of making prints.

Work and tumble: Printing one side of a sheet and turning it over from the gripper to the tail to print the second side using the same side guide and plate for the second side.

Work and turn: Printing one side of a sheet and running it over from left to right using the same side guides and plate for the second side.

Wove paper: A paper having a uniformed unlined surface with a smooth finish.

Wrinkles: Creases in paper occurring during printing. In inks, the uneven surface formed during drying.

Xerography: An electrophotographic copying process that uses a corona charged selenium photoconductor surface, electrostatic forces and dry or liquid toner to form an image.

Zahn cup: A device for measuring viscosity.

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Key Words: Ink

- Acetone
- Age stability
- Agglomeration
- Alcohol
- Aliphatic solvents
- Alkali resistance
- Base ink
- Binder
- Bleach test
- Body
- Carbon black
- Cellosolve
- Centipoise
- Chalking
- China clay
- Chlorinated rubber
- CMYK
- Cold color
- Colorant
- Color balance
- Color blocks
- Colorimeter
- Color key
- Color matching system
- Contrast
- Cyan
- Defloculation

- Densitometer
- Density
- Diatomaceous earth
- Diluent
- Dispersing agents
- Diluent
- Draw-down
- Drier
- Dry back
- Dye
- Efflux cup
- Expansion ratio
- Extenders
- Fadeometer
- Fading
- Film former
- Flocculation
- Foaming
- Focaltone
- Freeze/Thaw stability
- Gel
- Gelatin
- Gloss
- Gloss ink
- Gloss meter
- Heavy-bodied inks
- Hexachrome
- Hiccup
- Hot scuff resistance
- HSV
- Hue
- Hydrometer
- Hydrophilic
- Hydrophobic
- Ink mist
- Inkometer
- Iodine number
- Iron blue
- Lacquer
- Lacquer stations
- Length
- Light fastness
- Livering
- Long ink
- Magenta
- Mass tone
- Matte finish
- Metamerism
- Mileage
- Non-drying oils
- Opaque ink
- Pallette
- Paste drier
- Penetration
- pH
- Pigment
- Plasticizers
- PMS
- Polar solvents
- Primary colors
- Process blue
- Process colors
- Reducers
- Resin
- RGB
- Rollout
- Rub-proof
- Short ink
- Slip compound
- Slurry
- Soft ink
- Solids content
- Solvent
- Solvent release
- Spectrophotometer
- Spectrum
- Strength
- Subtractive primaries
- Surface tension
- Tack
- Tackoscope
- Thinners
- Thixotropy
- Tinctorial strength
- Tints
- Toner
- Transparent ink
- UV coating
- UV ink
- Varnish
- Vehicle
- Verticle adjustment
- Warm color

Key Words: Paper

- Alkaline paper
- Abrasiveness
- Basic size
- Binders
- Bleaching
- Bond and carbon
- Bond paper
- Book paper
- Broke
- Bulk
- Carbonless
- Calendar rolls
- Caliper
- Carload
- Cast coated
- Chemical pulp
- China clay
- Clean hole
- Coated paper
- Coated freesheet
- Coated groundwoods
- Compressability
- Constant gloss test
- Corrugation marks
- Cross-deckle misregister
- Cross direction
- Curl
- Deckle
- Deckle edge
- Diatomaceous earth
- Dimensional stability
- Dry cut
- Dull-coated
- Duplex paper
- Dylux
- Efflux cup
- Emboss
- Embossed finish
- Enamel
- English finish
- Fake color
- Felt side
- Filling in
- Finish
- Foil
- Foldover
- Free sheet
- Gloss
- Goldenrod paper
- Grain
- Grammage
- Groundwood pulp
- High-bulk paper
- Hygroscopic
- Image area
- Ink holdout
- Kraft paper
- Laid finish
- Laid paper
- Ledger paper
- Log
- M
- Machine coated
- Machine direction
- Matte finish
- Mechanical pulp

- Micrometer
- Moisture wrinkle or welt
- Mullen tester
- Neutral sodium sulphite process
- Newsprint
- Offset core
- Offset paper
- Pattern carbon
- Point
- Porosity
- Pressure sensitive paper
- Printability
- Psychrometer
- Ream
- Relative humidity
- Roto news
- Runnability
- Scale
- Semi-chemical pulp
- Sizing
- Slime hole
- Sliped core
- Slitting
- Slitter turnover
- Slug hole
- Slurry
- Smoothness
- Soft end
- Specular gloss
- Starred roll
- Stock
- Substance weight
- Substrate
- Sulphate process
- Sulphite process
- Super calendar
- Super calendar roto news
- Text paper
- Thermo-mechanical pulp
- Tooth
- Twin-wire machine
- Two-sidedness
- UCA
- UCR
- Undercut
- Unit
- Up
- Vellum finish
- Water mark
- Web
- Winding
- Wove paper
- Wrinkles

Key Words: Pre-press

- Abrasion marks
- Addition agent
- Alteration
- AM
- Analog color proof
- Anti-halation backing
- Aperture
- Apochromatic
- Aquatint
- Art
- Artboard
- Art director
- Ascender
- Author's corrections
- Automatic processor
- Bad break
- Base cylinder
- Basis metal
- Bezier curve
- Bimetal plate
- Bit
- Bit map
- Black-and-white
- Blow up
- Blue line
- Blue print
- BMP
- Board
- Body type
- Bold-face type
- Break for color / color break
- Brightness
- Bromide
- Bump exposure
- Burn
- Byte
- CAD / CAM
- Camera ready
- Camera ready copy
- Caps and small caps
- Carbon tissue
- CCD
- CD-ROM
- Cell
- Cell post
- Character generation
- Chemistry
- Chromalin
- Chrome
- CMYK
- Coating
- Color blocks
- Color correction
- Color filter
- Colorimeter
- Color key
- Color proofs
- Color separations
- Composite film
- Computer, analog
- Computer, digital
- Computer composition
- Condensed type
- Contact positive
- Contact print
- Contact screen
- Continuous-tone copy
- Contrast
- Conversion
- Copy
- Copy fitting
- Copy preparation
- Copyright
- Copy viewer
- Copy writer
- Chromalin
- Crop
- Crop marks
- CRT
- CTP
- Density
- Descender
- Densitometer
- Desktop publishing
- Developer
- Diazo
- Diffusion transfer
- Digital color proof
- Digital imaging
- Digital photography
- Digital plates
- Digitized typesetting
- Digitizer
- Direct screen halftone
- Display type
- Dithering
- Dot
- Dot etching
- Dots per inch (dpi)
- Double burn
- Dummy

- Duotone
- Duplicating film
- Dye
- Dye transfer
- Dynamic range
- Electronic dot generation
- Electrophotography
- Electrostatic plates
- Electrotype
- Elliptical dot
- Em space
- Emulsion
- En space
- EPS
- Etch
- Expanded type
- Exposure
- Facsimile transmission
- Film rip
- Fixing
- Flat
- Flatbed scanner
- Flat etching
- Flop
- Flush left
- Flush paragraph
- FM screening
- Focal length
- Fog
- Format
- "F" Stops
- Galley proof
- Gamma
- Gray component replacement
- Gelatin
- Generation
- GIF
- Gigabyte
- Goldenrod paper
- Graphic
- Graphic designer
- Gray level
- Gray scale
- Greek
- Gum arabic
- Gumming
- Hairline
- Halation
- Halftone
- Halftone gravure
- Hard chromium
- Hard copy
- Hard proof
- Hardware
- Hard dot
- Head margin
- Helio-Klischhograph
- High key
- Highlight
- Illustrator
- Imagesetter
- Iron perchloride
- Italic
- JPEG
- Justify
- Kern
- Key
- Keyboard
- Keylines
- Kilobyte
- Knockout
- Laminate
- Land area
- Lay out
- Leaders
- Leading
- Leveling action
- Letterspacing
- Line copy
- Lines per inch
- Line screen
- Local-area-network
- Logotype
- Loupe
- Lower case
- Magenta screen
- Magnetic storage
- Makeover
- Make up
- Marginal words
- Mask
- Mat
- Matchprint
- Matrix
- Measure
- Mechanical
- Mechanical separation
- Megabyte
- Menu
- Mezzotint
- Middle tones
- Mylar
- Non-reproducing blue
- Object oriented
- OCR
- Off-loading
- Off-press proofs
- OK sheet
- Opaque
- Orthochromatic
- Outline halftone
- Overhang cover
- Over printing
- Page description language
- Page make-up
- Pagination
- Pallette
- Panchromatic
- Paper master
- Paste-up
- PDF
- Photo CD
- Photoconductor
- Photo copy
- Photograph
- Photo illustration
- Photomechanical
- Photo plate
- Photopolymer coating
- Phototypesetting
- Pica
- Pixel
- Pixel depth
- Plate ready film
- Plate setter
- Point
- Position proof
- Positive
- Post Script
- Pre-press
- Pre-press proofs
- Presensitized plates
- Press proof
- Process lens
- Production artist
- Progressive proofs
- Ragged left
- Ragged right
- Reflection copy
- Resist
- Resolution
- Respi-screen
- RIP film
- Run-around
- Running head
- Sans Serif
- Scanner
- Screen
- Screen angles
- Screened print
- Screen ruling
- Script
- Serif
- Service bureau
- Silhouette halftone
- Soft proof
- Step-and-repeat
- Stereotype
- Stet
- Stochastic screening
- Stone
- Stopping out
- Strike-on composition
- Stripping
- Style sheet
- Surprint

- SWOP
- Tagged image file format
- Terabyte
- Text
- TIFF
- Toner
- Transparency
- Transparent copy
- Type gauge
- Vacuum frame
- Waterless plate
- Widow
- Wipe-on plate
- Wraparound plate

Key Words: Printing Process

- Additive primaries
- Adhesion
- Adsorb
- After-tack
- Against-the-grain
- Airbrush
- Alteration
- Angle of wipe
- Anilox inking
- Backlash
- Backup
- Back-up blade
- Bearers
- Bevel
- Blade coating
- Blade extension
- Black printer
- Blanket
- Bleed
- Blind image
- Blocking
- Blushing
- Break-out
- Bronzing
- Burr
- Butt
- Butt fit
- Chalking
- Closed loop system
- CMYK
- Coating
- Cobwebbing
- Cold color
- Collotype
- Color balance
- Color bar
- Color key
- Commercial register
- Common impression cylinder
- Conductivity
- Contact angle
- Contact area
- Copy viewer
- Crash number
- Crawling
- Crimping
- Cross-deckle misregister
- Cross marks
- Crossover
- Cure
- Cut-off
- Cut score
- Cylinder gap
- Dampeners
- Dampening system
- Densitometer
- Die
- Die cutting
- Die stamping
- Digital printing
- Doctor blade
- Doctor blade holder
- Doctor blade loading
- Dot gain or spread
- Doughnut
- Dryer
- Drop-out
- Dryback
- Drying in
- Electronic printing
- Electronic publishing
- Engraved printing
- Fanout
- Feathering
- Feeder
- Finish
- First down color
- Flood
- Flop
- Flying paster
- Four-color-process
- Form
- Form rollers
- Fountain solution
- Front end system
- Fugative
- Gang
- Gear streaks
- Ghost bars
- Ghosting
- Gloss
- Gloss meter
- Gravurescope
- Gray balance
- Grippers
- Gripper edge
- Gripper margin
- Grooving the cylinder
- Gutter
- Hairline
- Hairline register
- Hickey
- Holdout
- Hot scuff resistance
- Hydrophilic
- Hydrophobic
- Icicles
- Image area
- Image assembly
- Image carrier
- Imposition
- Impression
- Impression cylinder
- Imprint
- Ink fountain
- Ink mist
- Intaglio
- Jog
- Kiss die cut
- Kiss impression
- Lacquer stations
- Lamella
- Laminate
- Lamination
- Land area
- Lapping
- Laser
- Lateral adjustment
- Lip of the blade
- Makeready
- Manipulation
- Maximum angle of wipe
- Mealiness
- Minimum angle of wipe
- Moire
- Mottleton
- Mottle
- Non-impact printer
- No-screen exposure
- Off balance weight
- Offsetting
- Offset Gravure
- Offset Lithograhy

- OK Sheet
- Oleophilic
- Opacity
- Orange peel
- Oranosol
- Oscillation
- Over-run or overs
- Packing
- Perfecting press
- pH
- Picking
- Piling
- Pin register
- Plate cylinder
- Plate gap
- Poor trapping
- Press number
- Press proof
- Printability
- Print quality
- Printing
- Process printing
- Psychrometer
- Railroading
- Railroad tracks
- Register
- Register marks
- Registration
- Relative humidity
- Repeatability
- Reprography
- Retrofit
- Reverse
- Reverse angle doctor blade
- Roller stripping
- Rub-proof
- Runnability
- Running in
- Scan-a-web
- Scavenger marks
- Score
- Screen
- Screen angles
- Scum
- Scumming
- Set-off
- Shaft deflection
- Sharp wipe
- Sharpen
- Sheetwise
- Show through
- Side guide
- Signature
- Skid
- Slur stick
- Snowflaking
- Solid loading
- Solvent load
- SPC
- Spectrophotometer
- Split fountain
- Spoilage
- Spot color
- Spot varnish
- Staging
- Static neutralizer
- Stock
- Streaking
- Striping
- Stroke of oscillation
- Substrate
- Surface tension
- Thermal dye sublimation
- Thermal printers
- Tolerances
- Toner
- Trapping
- Trim marks
- Trim size
- Two-sheet detector
- Vignette halftone
- Warm color
- Washup
- Water break
- Waterless printing
- Waste
- Wear in
- Web
- Web press
- Web tension
- Wetting
- Wetting agent
- Whiskers
- Winding
- Wire edge
- With the grain
- Wood cut
- Work and tumble
- Work and turn
- Wraparound plate
- Xerography

Key Words: Bindery / Finishing

- Accordian fold
- Antique finish
- Backbone
- Banding
- Bind
- Bindery
- Blind embossing
- Brochure
- Bulk pack
- Case bind
- Collate
- Comb bind
- Cover paper
- Crimping
- Crop
- Crop marks
- Cutscore
- DDES
- Die
- Die-cutting
- Emboss
- Embossed finish
- Eurobind
- Flush cover
- Foil stamping
- Folio
- French fold
- Gathering
- Guillotine
- Gutter
- Insert
- Kiss die cut
- Laminate
- Lamination
- Layflat
- Oblong
- Page count
- Perfect bind
- Recto
- Right-angle fold
- Saddle stitch
- Self-cover
- Side wire
- Signature
- Skid
- Spine
- Spiral binding
- Stamping
- Text
- Transfer tape
- Trim size
- Verso
- Wire-O
- Wire-O binding
- With the grain