General Decoration Terms

DIGITAL PRINTING: A 4-color process of printing directly from a computer file onto a garment.

DEBOSSING: A process in which fabrics are engraved with the use of heat rollers under pressure to produce a concave/sunken design on the fabric surface.

EMBOSSING: A process in which fabrics are engraved with the use of heated rollers under pressure to produce a raised design on the fabric surface.

EMBROIDERY: Decoration consisting of needlework created using a special machine that is programmed to stitch a design combining texture, pattern and color.

HEAT TRANSFER: The process of transferring a design from a specially treated paper to a garment using temperatures around 375 F (190 C). See "Hot-peel transfer" and "Cold-peel transfer."

LASER APPLIQUÉ: A laser beam is used to cut single or multiple fabric layers revealing a fine, detailed design.

LASER ETCHING: A process that uses laser technology to etch or burn a mark on a fabric surface.

PRINTED TRANSFER: Printed transfers use many of the same inks and techniques of printing to create a design that is transferred from a sheet to a garment using heat.

SCREEN PRINTING: The process of printing by squeezing ink through screens allowing color to pass through open areas to create a design. Multi-colored designs are achieved using one screen for each color in the design.

STUDDED TRANSFER: Colored metallic and rhinestone studs are arranged on a sheet that is used to transfer the studs to a garment using heat.

Embroidery Terms

APPLIQUÉ: Decoration or trimming cut from one fabric piece and stitched to another to add dimension or for design techniques.

BACKING: Material used beneath the embroidered fabric to provide stability and support.

BEAN STITCH: Three stitches placed back and forth between two points. Often used for outlining because it eliminates the need for repeatedly digitizing a single-ply running stitch outline.

CONNECTING STITCHES: Threads that connect short distanced objects in embroidery. Distance of 1/16" is the industry standard for using a connecting stitch.

CROSS STITCH: Two stitches that cross to form an X.

DENSITY: Number of stitches per given area.

DIGITIZING: Conversion of artwork into a series of stitch commands read by an embroidery machine's computer via a card.

DISK OR TAPE: Disk containing computerized embroidery designs read by the embroidery machine's computer.

EMBLEM/PATCH: Embroidered design with a finished edge, stitched independent of garment.

FELT: Non-woven fabric made by layering thin sheets of fibers, then applying heat, moisture and pressure to shrink and compress the fibers into a thick matted cloth that will not ravel or fray. Used for appliqué designs and letters.

FILL STITCH: A series of running stitches commonly used to cover large areas.

FINISHING: Processes done after the embroidery is completed, including trimming loose threads, removing excess facing or backing, and pressing or steaming to remove puckers and hoop marks.

FRAME: Holding device for inserting the hoop beneath the needle to maintain stability during the embroidery process.

HOOP: Wood, plastic or steel device used to tightly grip the fabric and stabilizer between an inner and outer ring. Attaches to machine's frame. Designed to hold fabric taut against the machine bed for embroidery.

LETTERING: Embroidery using letters or words. Lettering, commonly called "keyboard lettering," may be created using an embroidery lettering program on a PC or from circuit boards that allow variance of letter style, size, height, density and other characteristics.

LOCK STITCH: Formed by three or four consecutive short, tight threads stitched at end of embroidery to prevent raveling.

LOOPING: Loops on the embroidery surface generally caused by poor top tension or tension problems. Typically occurs when polyester top thread has been improperly tensioned.

MONOGRAM: Embroidered design composed of one or more letters, usually one's initials or name.

PUCKERING: Result of fabric being gathered by the stitches. Possible causes include loose hooping, lack of or improper backing, incorrect tension or a dull needle.

PUFF EMBROIDERY: Stitching a dense motif over embroidery/craft foam to create a three-dimensional effect.

REGISTRATION: Correct registration is achieved when all stitches and design elements line up correctly.

RESIZING: The ability to scale a design to different sizes. May cause density problems unless stitch count can be altered.

RUNNING STITCH: A single stitch between two points, used for outlining and fine detail.

SATIN STITCH: Formed by closely arranged zigzag stitches. Can be stitched at any angle and with varying lengths.

SEQUIN EMBROIDERY: A technique in which sequins are embroidered directly onto a garment or cap.

SPECIALTY FILL: Fill stitch capability that produces a design in relief.

SPECIALTY THREADS: Threads designed for effects such as shine, glitter, iridescence or thickness. The thread soften are made from synthetic materials including rayon, mercerized cotton, metallics and textured nylon.

SPI - STITCHES PER INCH: System for measuring density or the amount of satin stitches in an inch of embroidery.

TACKLE TWILL: Letters or numbers, cut from twill fabric that are commonly used for athletic teams and organizations. Tackle twill appliqués attached to a garment have an adhesive backing that tacks them in place; the edges of the appliqués are then zigzag stitched.

TENSION: Thread tautness.

THREAD: Fine cord of natural or synthetic twisted fiber used for stitching. Machine embroidery threads come in rayon (high sheen), cotton (duller finish), polyester (strong and colorfast), metallics (synthetic core wrapped with metal foil or thin slivers of metal foil) and acrylic (sheen similar to rayon).

TOPPING: Material hooped or placed on top of fabric to hold the embroidery stitches above it.

TRIMMING: Operation in the finishing process that involves trimming the reverse and top sides of the embroidery, including jump stitches and backing.

Screen Printing Terms

ABRASION-RESISTANT: The ability of a surface to resist deterioration by friction. Commonly describes the durability of cured ink.

BLEEDING: The migration of ink, pigment or dye into unwanted areas. Typically occurs when one ink spreads or mixes with another ink, forming an unwanted third color. Also can occur during high-temperature curing where a low-opacity ink is placed on a dark poly/cotton garment - red or black, for example. Also known as color migration.

BLEND: A printing technique using multiple inks in one screen.

BONDING AGENT: An additive that gives ink better adhesion to such substrates as nylon.

CLEAR SOFT-HAND INK: Clear ink that has no pigment but creates a darker, tonal look when applied to a garment. It also features a uniquely soft hand. Best results occur on color-wash and medium color garments. Not recommended for White, Navy, Dark Brown, or Black garments.

COLORFAST: The ability of an ink to retain its color on a printed garment through laundering, exposure to light and normal storage.

COLOR SEPARATION: Separating a multicolor design into its primary colors of yellow, cyan, magenta, and black. Individual screens for each color then are prepared, with each color applied where needed to recreate the full-color design.

CONVEYOR DRYER: A dryer that incorporates a conveyor belt that moves garments through aheating chamber. Sometimes called tunnel dryers.

CRYSTALINA INK: A clear glitter ink that is printed on white or over a color to give a sparkle effect. Crystalina ink may change look of base color.

CURING: An essential process typically associated with plastisol inks whereby temperatures between 280-320 degrees F (137-165 C) are necessary to fuse, or cure, the inks.

DISCHARGE: The one-step process where special inks that are applied to a substrate – most often a black T-shirt – chemically bleach out the substrates color to create a printed image. The process is accelerated and completed as the garment passes through a curing dryer. Also, the inks that are used.

DISTRESS: To make something appear worn. A variety of distressing techniques can be applied to artwork resulting in different looks.

FLASH CURE: A partial curing (fusing) process of plastisol inks most often used in multicolor printing between color applications.

FLOCK: Very short individual fibers that are applied via adhesive to a backing to form a velvety surface.

FLOCKED TRANSFER: Colored fibers are adhered to a transfer sheet to create intricate textured designs that are transferred by heat to a garment.

FOUR-COLOR PROCESS: The process of reproducing a full-color design from the original artwork to the screen printed surface. Special process-color inks, which are transparent, are used. See "Color separation."

GLITTER INK: Colored ink with small flecks of glitter.

HALFTONE: A print that is photographically reproduced using a series of small and large dots to represent the varying shades or tones of a design. In screen printing, details and dark and light tones are represented by dots of varying sizes: small dots form light tones, large dots form darker tones.

HAND: The feel of ink on a substrate's surface. A "soft" hand has a light feel; a print with "no" hand feels like nothing has been placed on the fabric. "Heavy" hand examples are puff inks and the rubbery-feeling letters on football jerseys. Also, the weight, heft and fineness of fabric itself. For example, a pima lisle cotton knit has a finer hand than a 50/50 cotton/polyester fleece.

HIGH-DENSITY INK: A specially formulated ink that adds height to a design with a clear, sharp edge. Creates a 3-D appearance.

MESH: The woven fabric used to make screens. Usually composed of synthetic fibers.

MESH COUNT: The system used to designate the number of threads per inch in a woven fabric. A high mesh count means the fabric has smaller holes and is more tightly woven. A low mesh count means the fabric has larger holes and is more loosely woven. Mesh count affects design reproduction detail - the tighter the mesh count, the better the print quality.

METALLIC INK: Powdered metals, such as aluminum and bronze, processed with ink to give appearance of gold or silver. Has a smooth finish.

NON-REPRODUCIBLE COLOR: Certain colors (fluorescent, for example) that can't be perfectly color-matched in process-color printing.

OPACITY: The quality or ability of an ink to keep light from penetrating. To completely cover a substrate, thereby fully hiding the color of the garment underneath.

OVERALL: Refers to a print whose image or images cover the entire substrate, front and back. Also referred to as "All over."

PALLET: A surface that supports a garment during the printing process. Also called a shirtboard or a platen.

PLASTISOL: A family of inks popularly used by screen printers. The inks contain a plasticizer, such as polyvinyl chloride, or PVC.

PROCESS COLORS: Primary printing colors of magenta, cyan, yellow and black that are printed one over another to produce different hues in a multicolor print. The inks used are transparent, exhibiting very low opacity. Requires color separations. See "Opacity" and "Four-color process."

PUFF INK: An ink that expands when heated, giving a three-dimensional look.

REGISTRATION: The aligning of screens using special marking guides or pins to ensure proper color/design placement and crisp detail on the printed surface.

SHIMMER INK: A very fine glitter ink with a powdered shimmering appearance.

SIMULATED PROCESS: Process uses spot color inks and special seperations using halftones to achieve a similar photorealistic look as four-color process.

SQUEEGEE: A tool that forces the ink through the screen onto the printing surface.

SUBLIMATION: A type of transfer in which dyes, rather than inks, are used to transfer a design onto a substrate with a combination of heat and pressure. The dyes vaporize and are absorbed by polyester fibers. The process can be used to print textiles, as well as mugs, plates or other specialty items.

SUEDE INK: Inks with a soft textured suede-like hand.

WATER-BASED INK: Inks that have a water base, as opposed to a petroleum or plastisol base.

WET-ON-WET: Printing one color over another color before the first color has dried.