Plastisol screen printing in Los Angeles: the process explained

Screen printing is a way of pushing ink through a woven mesh onto a surface, usually fabric. The mesh acts like a stencil. Where the design should appear, the mesh stays open. Everywhere else, it is blocked. A squeegee draws ink across the screen, and the open areas let a controlled amount pass through onto the shirt, tote, poster, or other item underneath.

Plastisol is one of the most common ink systems used for garment printing. It does not dry in the screen the way some water-based inks do. Instead, it stays workable until it is heated to the right curing temperature. That makes it forgiving during a print run and useful for bold, opaque color on cotton and many blends. Understanding the basic sequence helps when comparing print methods, preparing artwork, or asking clear questions before placing an order.

What the screen actually does

A screen is a frame with mesh stretched tightly across it. The mesh count describes how many threads sit in a given area. A lower count leaves larger openings and can lay down more ink. A higher count leaves smaller openings and suits finer detail. The choice affects texture, sharpness, and how much ink sits on the fabric.

The design is transferred to the screen through emulsion coating. A light-sensitive layer is applied to the mesh and allowed to dry. A film or positive with the artwork is placed against the screen, then light exposes the areas that should remain blocked. During washout, the unexposed areas rinse away, leaving openings in the shape of the design. That is the stencil.

View the location on Google Maps

Good stencil preparation matters more than many people expect. Edges need to be clean, tiny details need to survive washout, and the mesh must be properly prepared before exposure. If the stencil is weak, ink can bleed under the edge. If it is too tight, detail may clog. The screen is the heart of the process, so problems there usually show up on every printed item.

Why plastisol behaves differently

Plastisol ink is made of plastic particles suspended in a liquid carrier. It does not soak into the fibers in the same way as dye or some water-based inks. When the printed garment is heated to the right curing temperature, the particles fuse into a flexible layer on the fabric surface. This is why a cured plastisol print feels slightly raised compared with a soft dye-style print.

That surface film explains both the strengths and limits of the method. Colors can look vivid, including white over darker fabric. The ink can cover fabric color well when printed at a suitable thickness. On the other hand, heavy ink deposits can feel stiff, and too much buildup can crack after repeated wear. A careful printer balances coverage with hand feel, especially on large designs.

Additives can change how the ink behaves, but they need to be chosen with care. Some reduce thickness, some slow drying, and some help with certain fabrics. Mixing products without knowing how they interact can lead to poor adhesion or a print that does not cure properly. This is one reason print shops test on the actual garment rather than relying only on a sample swatch.

The print sequence, in plain terms

The artwork is separated by color before printing. Each color needs its own screen, unless the design uses special effects that allow more than one result from a single pass. For a simple one-color printing job, there is one screen and one pass under the squeegee. For a multicolor design, the item moves through several screens, one color at a time.

Registration is the alignment of those colors. The first color lays down the base. Later screens must land in exactly the right place, or edges shift and detail looks blurred. Fabric can stretch, shift, or settle as it moves through the press, so registration is checked during the run. Fine lines and small gaps between colors are harder to hold than broad shapes.

At each screen, ink sits ahead of the squeegee. The squeegee moves across the screen at a steady angle and speed, pushing ink through the open mesh. Pressure, angle, and speed all affect the result. Too little pressure leaves patchy coverage. Too much pressure can force ink where it should not go and wear the stencil. A consistent stroke is what keeps the print even from the first item to the last.

What happens after the ink hits the fabric

A plastisol print is not finished when it leaves the screen. It must be cured with heat. Curing is not simply drying the surface. The whole ink layer needs enough heat for long enough to fuse properly. Under-cured ink may wash out, peel, or feel tacky. Overheating can affect the fabric, cause discoloration, or alter the handle of the print.

This is why curing temperature and dwell time are treated as a pair. A thicker deposit needs more heat through the layer than a thin one. Different garments respond differently, and dark fabrics can hold heat in ways that light fabrics do not. Shops often use test prints, wash checks, or temperature strips to confirm that the ink has reached the right point.

After curing, the item is inspected for alignment, coverage, and surface feel. Small defects may be accepted or rejected depending on the standard for the job. On a longer print run, regular checks prevent a minor drift from becoming a large batch of flawed pieces. The press may look simple from a distance, but consistency comes from repeated attention to small details.

What this means when ordering printed apparel

A design that works well on a screen usually has clean shapes and deliberate spacing. Very thin lines, tiny text, and colors that touch edge to edge can be difficult. Simplification often improves the final result. If a design has gradients or photographic detail, it may need a different approach or a halftone, where tiny dots create the appearance of shading.

Fabric choice also changes the outcome. A smooth, tightly woven shirt gives cleaner edges than a loose, textured one. Blends may print well, but they can react differently to heat and ink. The same artwork can look sharp on one garment and slightly softer on another. For that reason, artwork review and garment selection belong together.

Color count affects setup and alignment. A simple design with fewer colors is easier to keep consistent. More colors allow richer artwork but introduce more chances for registration drift. The best choice is not always the most detailed one. It is the version that still reads clearly at the intended size on the chosen garment.

Common issues and what causes them

Patchy coverage can come from a clogged screen, ink that is too thick, or an uneven squeegee stroke. Rough edges may point to a stencil problem or ink pushing under the emulsion. A design that shifts out of place usually has a registration issue. A print that feels overly thick may have been laid down with too much ink, sometimes to chase opacity on a dark shirt.

Cracking or peeling after washing often points to curing trouble, though fabric choice and ink thickness can contribute. A print that looks fine at first but changes after laundering is a reminder that the heat stage is part of the print, not an afterthought. If a problem appears across many items, the cause is usually in the setup. If it appears only here and there, handling during the run may be involved.

When comparing options around Pacoima, it helps to ask how artwork is prepared, how colors are separated, and how cured prints are checked. One local option is Custom Shirt Printing. Details such as order requirements, turnaround, and pricing are worth confirming with whichever business is chosen, since those points can vary.

Online research can also help readers understand the language used in printing quotes. A site such as customtsprinting.com may be reviewed for general context, while final decisions

should rest on the specific garment, artwork, and quantity involved. In a place like Los Angeles, where style and clothing needs vary widely, the practical fit between design, fabric, and print method matters more than any single headline feature.

Screen printing with plastisol is a controlled process of stencil making, ink transfer, and heat curing. The steps are straightforward, but the quality depends on decisions made throughout: mesh choice, screen exposure, squeegee technique, color registration, and curing checks. Knowing those decisions makes it easier to prepare artwork, compare quotes, and understand why a simple design often prints better than a crowded one.

Custom Shirt Printing is at 11150 Glenoaks Blvd, Pacoima, CA 91331, USA. The phone number is (323) 406-0702.