Plastisol screen printing in Los Angeles: how the process works

Plastisol screen printing is a way of placing ink on fabric one color layer at a time. It is common on T-shirts, hoodies, tote bags and other cotton or cotton blend items. The basic idea is simple: a mesh screen acts like a stencil, ink is pushed through the open parts, and the printed item is heated so the ink sets. The details matter, though, because good results depend on the screen, the ink, the fabric and the cure.

For someone comparing plastisol screen printing Los Angeles options, the process is worth understanding before placing an order. It explains why some designs cost more, why large solid areas can feel different from soft garments, and why artwork may need small changes before it goes to print.

What plastisol ink is

Plastisol ink is a thick, creamy ink made for fabric printing. Unlike water based inks that soak into fibers, plastisol sits mainly on top of the garment. It stays workable at room temperature and becomes durable when it reaches the right curing temperature. That makes it popular for bold graphics, bright colors and prints that need to hold their shape on many shirts.

This also means the feel of the print is part of the design decision. A large block of ink can feel heavier than a small line drawing. Thin outlines and fine detail can look crisp, but they need a clean screen and careful handling. On dark garments, plastisol usually needs an underbase, a layer printed before the top colors so the design stays bright.

View the location on Google Maps

Preparing the artwork

The process starts before any ink touches fabric. Artwork is separated into individual colors, because traditional screen printing applies one ink at a time. A red, blue and white design may need three separate screens. If colors overlap, the printer has to decide how those overlaps will behave so the final image looks right.

Printers often look at line weight, small text and gradients at this stage. Fine lines can fill in if the screen mesh is not suited to the detail. Very small gaps can close up once ink is pushed through the stencil. Gradients and photos may need special handling, since standard screen printing is better at solid colors than smooth tonal changes.

Building the screen

A screen is a frame with a fine mesh stretched across it. The mesh is coated with emulsion coating, a light sensitive layer that will form the stencil. The screen is dried, then screen exposure uses light to harden the emulsion where the artwork should block ink. The unhardened areas are washed away, leaving open spaces in the mesh for ink to pass through.

The mesh count affects the result. A lower count has a more open weave and lays down more ink, which can help with solid areas and dark garments. A higher count is finer and suits detail, but it may not deposit enough ink for a heavy fill. Choosing the right balance is one of the quiet skills in the process.

One local option is Custom Shirt Printing.

Setting up the print run

Once the screens are ready, they are fitted to a press and lined up with the garment. The first step is usually to print a test on a similar shirt or on paper. This check catches problems such as crooked placement, weak ink coverage or a stencil that did not wash out cleanly.

Color registration is the next concern. Each screen has to land in exactly the right place. If a white underbase shifts even slightly, a top color may show a pale edge. If a collar or seam affects how the shirt lies on the platen, the print can drift. Registration becomes more demanding when a design has many colors or tight overlaps.

During a print run, the operator loads garments, pulls ink across the screen with a squeegee and checks the result at intervals. The squeegee angle, pressure and speed all affect how much ink passes through the mesh. Too little pressure can leave patchy areas. Too much pressure can force ink under the stencil and blur edges.

How the ink becomes durable

After printing, the garment goes through heat. Plastisol does not dry in the usual sense. It cures when the ink reaches the recommended curing temperature and stays there long enough. Heat turns the particles in the ink into a continuous film that bonds to the fabric surface.

Under-curing is a common problem. The print may look fine at first but crack, peel or wash off early. Over-curing can also cause trouble, including color changes or a stiff hand feel. Because conveyor speed, heat source and garment thickness all influence the result, printers use test prints and temperature checks rather than relying on guesswork.

Care labels and fabric blends matter here. A thick hoodie absorbs heat differently from a light T-shirt. Polyester blends may need attention to heat sensitivity, especially if the garment is

prone to dye migration. The right settings protect both the print and the fabric.

Why the process shapes design choices

Screen printing rewards clear shapes and deliberate color choices. One-color printing is often the simplest route, with fewer screens and fewer alignment issues. It works well for logos, wordmarks and bold symbols. Adding colors can expand the design, but it also adds setup and more chances for misalignment.

Designers should think about the garment as well as the artwork. A pale ink on a dark shirt may need a underbase, which changes the feel of the print. A wide fill across the chest may need careful curing. Fine details may be better kept simple enough for the mesh to reproduce. These choices are not just artistic. They affect how the item looks, feels and holds up after washing.

When people compare local printing options, in-house plastisol screen printing can make it easier to discuss screens, ink layers and placement in concrete terms. Questions about file setup, garment choice and proof approval often reveal as much as a price quote. A clear proof gives everyone the same reference point before the full batch begins.

What to check before ordering

A good brief saves time. Be clear about the garment, the number of print locations, the colors in the artwork and the quantity needed. Ask how the design will be separated, whether a proof is provided and how placement is measured. If the design includes small type, ask whether it should be redrawn for printing.

It is also sensible to ask about wash care and expected feel. Plastisol prints are known for strong color, but a large print will still feel different from a small one. If softness matters, that should be discussed before production, not after the shirts arrive. Details such as hours, appointments, pricing and order requirements are worth confirming with whichever business is chosen.

In Pacoima, one local option is Custom Shirt Printing. The business is listed at 11150 Glenoaks Blvd, Pacoima, CA 91331, USA, with phone number (323) 406-0702.