Methods of Fabric Printing

LITTLE COCALICO CUSTOM FABRIC PRINTING

Screen Printing

Screen printers utilize either flat screens or a rotating cylindrical screen to transfer designs onto the fabric with various colors of ink. Each color used in the design requires its own screen.

pros

- can produce large quantities quickly
- produces vibrant colors
- can be used on a wide variety of fabric types

cons

- not practical for small quantities
- resource intensive (each color requires a screen)
- uses excess water, ink, and chemicals
- inks and chemicals used can be toxic and harm the environment if not handled properly

Reactive Dye Digital

Reactive dye and acid dye digital printing utilizes digital ink-jet style printers to print designs on fabric. A reactive coating is applied to the fabrics, creating a reaction that helps the dyes bond to the fabric. This process requires the printer, a steaming unit, a washer unit, and a drying oven.

pros

- able to produce vibrant color
- works well on a wide variety of natural fiber fabrics

cons

- complex process that requires multiple machines
- inconsistent results from one run to the next
- can be harmful to the environment

Dye Sublimation Digital

Designs are first printed onto a special transfer paper using a sublimation ink. The design is then transferred onto the fabric from the paper using heat and pressure to bond the ink to the fabric.

pros

- simple process with low-cost options
- high-detailed quality prints
- allows for quick turnaround times
- consistent colors between print runs

cons

- only works on synthetic fabrics
- requires ongoing disposal of transfer paper

Digital Pigment

This method applies ink and binders directly to the fabric using precision print heads. After the ink is applied, the fabric passes through a heat press/oven that sets the color onto the fabric.

pros

- eco-friendly printing with options for organic inks and no waste
- highly consistent and repeatable
- enables small print runs and fast turnaround times
- amazing light fastness
- works with most fabric types

cons

- older methods can have washing and crocking issues
- quality printers are a significant investment

Comparison

	Screen Printing	Reactive Dye Digital	Dye Sublimation Digital	Digital Pigment
able to produce quality prints	×	×	×	×
consistent colors between runs	×		×	×
prints on wide range of fabrics	×	×		×
quick, print on demand capable			×	×
good for large retail print runs	×	×		×
eco-friendly				×