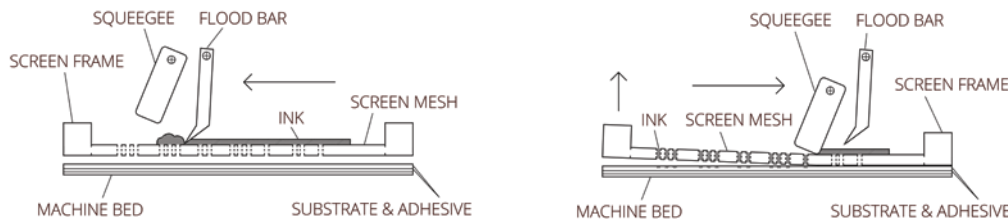


Screen printing is one of the oldest forms of printing, dating back to China during the Song Dynasty (960-1279 AD). The longevity of screen printing remains due to the wide variety of materials, inks, durability, and specialized properties other printing methods can't replicate.

Screen printing uses an oversized stencil to print images onto material (substrate). We first stretch fabric (mesh) across a metal frame. This is a screen. The screen is then coated with emulsion.

Using a computer-imaging device, the screen is exposed to beams of light that transfers the image onto the mesh. When washed, the emulsion creates an impermeable barrier (stencil) within the mesh, filling in the gaps and preventing ink from seeping through the negative spaces of the image, leaving the remaining areas open.



The screen is laid overtop the material, and ink is poured onto the screen. A flood bar spreads the ink evenly over the surface of the screen, and a squeegee pushes ink through the open areas, transferring the image onto the material below. For each color needed, this step is repeated with more screens. When all the colors are combined onto the material, it produces the final design.



PRINTING WITH PURPOSE

Empire has pushed screen printing to a new level, reducing our carbon footprint with our green commitment. We've eliminated the harsh chemicals needed for film output and replaced it with direct-to-screen and CST imaging units. We also developed the world's first UV LED ink curing technology for screen printing, which eliminates ozone emissions, mercury vapor bulbs, and reduces energy consumption.

AT A GLANCE

INKS:

- UV LED
- Conventional inks

SPECIALTIES:

- Selective textures
- Screenable adhesives
- Transparent or colored windows
- Dead fronts
- Backlit products
- Glitters
- Chrome
- 4 color process

SUBSTRATES:

- Vinyl
- Mylar
- Polycarbonate
- Styrene
- Sintra
- Coroplast
- Acrylics
- PVC
- Ri-cling
- Aluminum
- Many more

USES:

- Labels
- Decals
- POP
- Floor graphics
- Signage
- Overlays
- Two-way windows

DURABILITY:

- 5+ years outdoors

RESOLUTION:

- 92 LPI / 1270 DPI
- 65 LPI / 1270 DPI

