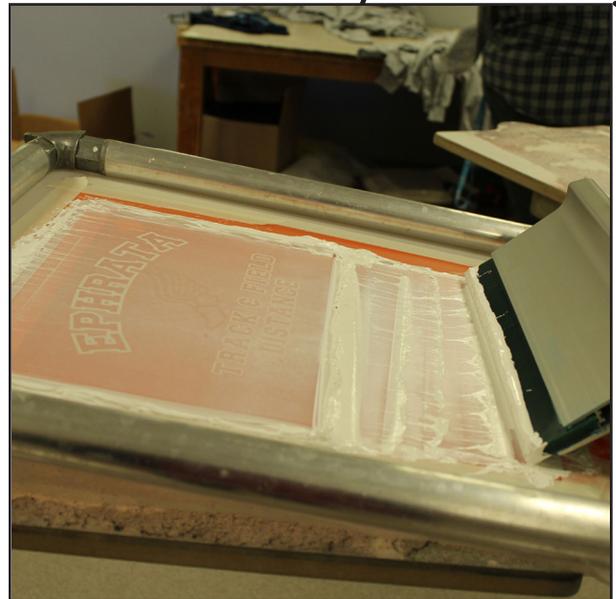
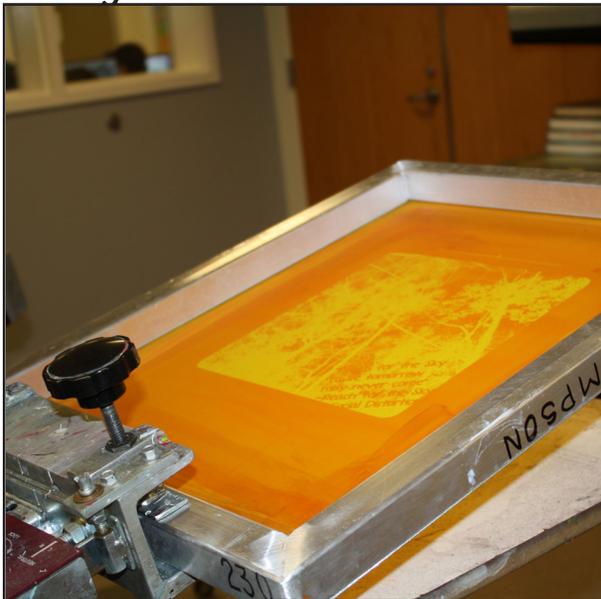


Amy N. Thompson

# What is screen printing?

Screen printing is the process in which you transfer a design to a substrate via a mesh with essentially a stenciled design on it. To transfer the ink to the substrate you would then use a squeegee or a blade to drag the ink across the image area where it travels through the mesh and onto the substrate you're using.



## Substrates

Substrates are the materials you can screen print onto. Some examples of substrates are:

- Shirts
- Metal
- Pellon
- Plastic
- Glasswear
- Cardboard
- Paper
- Wood

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# Pre-Printing Materials

When screen printing there are several different materials that are necessary to have on hand.

The first materials you should have of course a frame and mesh. Some of the frame and mesh types used are:

- Roller Frames
- Alluminium
- Wood
- Draw-Bar Frames
- 40-86 (Glitter Ink)
- 110 & 156 (Standard)
- 305 (high detail textile)
- 335, 380 & 400 (UV Ink)

The second material would have to be emulsion. Emulsion is the substance you use to create your stencil onto the mesh. Emulsion comes in various different colors.

Once you have emulsion on the mesh the next step would be to expose your positive onto the screen and wash it out. After your screen is dry you would then add liquid blockout around the edges of the screen that the emulsion does not cover and on any spots on the screen that washed out in any unwanted image areas.



# Printing Materials

At this stage you are ready to print. When printing you need to keep in mind what ink type you are going to use. There are many different kinds of ink that can be used. For example there is Plastisol ink. Plastisol ink is a plastic-based ink that is commonly used most among screen printers. However, other kinds of ink are used as well. Some of those are:

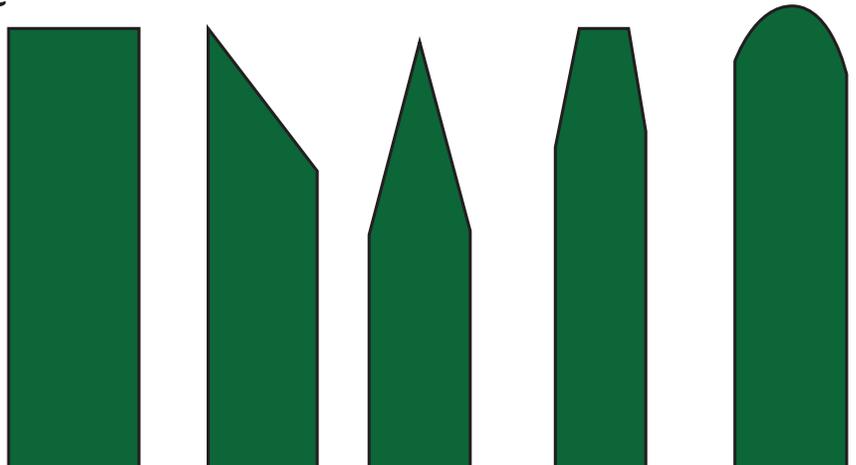
- Glitter
- Water-based
- Neon
- Foil
- Metallic
- Shimmer
- Soft Hand
- Discharge



Once you have determined what kind of ink and the color you wish to use then you would grab your squeegee. There are different types of squeegee blades that can be used. But the most common ones used in the industry are round and square squeegees.

The different blade types shown are:

- Square/Straight
- Single Bevel
- Double Bevel
- Blunt
- 3. • Round



# Automated vs. Manual Press

The advantages of using an automated press versus a manual press are something a screen printer should consider before starting a press run. An automatic press can print a run quicker than someone could on a manual press and it certainly maintains pressure more consistently than on a manual press.

On a manual press you have better control over the image appearance and can use varying amounts of pressure more easily.

There have been arguments over whether or not automatic presses put out better quality prints than a manual. However, they produce roughly the same quality print.

When you break it all down and look at it the biggest difference is really just the amount of time the press run will take. Automatic will most certainly make for a faster run, but the quality would not be compromised if you did the same run on Manual.

# The Future of Screen Printing

Some people believe screen printing in the future may become inexistant but based on the trends on the past for screen printing proves the opposite.

Screen printing is the oldest of all of the printing processes but like all things the technology of screen printing is evolving with the times making the screen printing process easier with every passing year. Even though previous ways of screen printing may be working their way out of favor the screen printing business is still thriving.

It seems screen printing will continue to evolve over the future years but what exactly that future will hold is not set in stone. However, some technological advances are theorized to be that they may add in a "roller squeegee system, more advanced ink curing techniques, the making of pre-coated mesh, or even single-pass multicolor printing.