

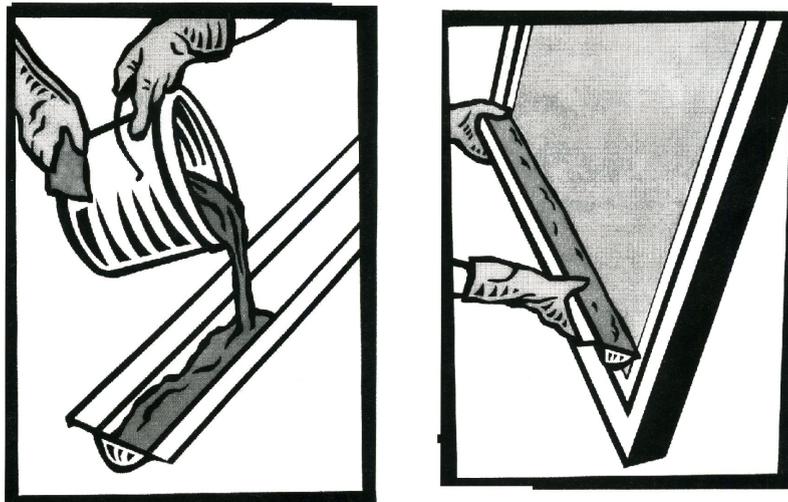
Screen Printing for Textiles

Most screen printing techniques use a stencil which ink is pushed through to create an image. This stencil can be made from thin cut out paper taped to the back of a screen or can be created using photosensitive emulsion with digital or hand drawn imagery.

A **positive** is the term used for the artwork that you expose with UV light onto a screen coated with emulsion. Positives can be produced from photocopies, laser printouts, acetates, drawings, paintings or black cut outs onto tru-grain or onto tracing paper. It is most important that you create a positive as a black and white image. The areas you wish you print must be dense black. Any grey areas on an image won't expose properly. To gain tones of grey there is a method called halftone when preparing an image on Adobe Photoshop.

Making a Photostencil

- Ensure that the screen is clean from any ink, old images and grease and that the screen is completely dry.
- To coat the screen, rest it against a wall or ask someone to hold it for you with the outside of the screen facing you. Position the trough at the bottom of the mesh – NOT on the frame and tilt slightly towards the screen to make sure the emulsion is in contact with the mesh. Glide the trough to the top of the mesh, pause and tilt the trough back to contain the emulsion. Use the trough from bottom to top of the mesh again to remove any excess emulsion. Pour any excess emulsion back into the tub, wash the trough with a sponge and water and wear gloves when cleaning it.



- Leave the screen to dry in a warm dark place for 20 - 30 minutes.
- When the emulsion is dry take it over to the UV exposure unit. Place your positive **FACE UP** on the glass top and then carefully place the screen on top with the emulsion layer in direct contact with the positive. You will need to weight the screen down with foam and a wooden board – see instructions on the wall and ask for guidance if in doubt.

- Place the cover over the screen, set to correct exposure times (refer to the chart on the wall or ask a member of staff if you're unsure), press start.
- Once the exposure has finished remove the screen and wash it in the washout booth with water on both sides. You should see the image slowly being revealed on the screen. Leave the screen to dry.

Preparing to Print

- When your screen is dry use brown parcel tape to tape over any gaps in the emulsion on the screen. If you have two images on one screen you can tape over the one you don't want to print.
- The inks used in textile screen printing are binder FF mixed with pigment. The ratio is approximately 100g binder mixed with 5g pigment. Before you start printing make sure you have enough ink mixed for the number of prints you wish to make.
- Tape your fabric (natural fabrics such as cotton or linen with a smooth surface are best to print on) down to the table tightly and make sure you register where you want the screen/image to go on each piece of cloth before you start printing.

Printing

- Make sure the screen is well weighted down
- Using a spatula pour the ink in a line above your image
- Choose a squeegee that covers the whole image
- Hold the squeegee at about a 45 degree angle and drag all the ink down the screen across the whole image, then take the ink back across to the top. 2 pulls of the squeegee will be enough ink for a medium weight fabric, anything heavier may need 4-6 pulls of the squeegee.

Cleaning the Screen

- When you've finished printing scrape any remaining ink off the screen. Any leftover ink can be used again
- Remove the screen gently from the table
- Thoroughly clean screen with water in the washout booth and remove any tape
- Make sure all squeegees and spatulas are cleaned too

Fixing

- Once the ink is completely dry the fabric will need heat setting to make sure the ink is fixed and washable.
- Using the heat press, set the fabric for 1 minute on 160 degrees. Fixing can also be done using an iron with some greaseproof paper over the fabric.

Further Reading/Useful Resources

There are many artists and designers who use textile screen print processes and the type of work can vary greatly. These may be a starting point for some inspiration:

<http://www.lauraslater.co.uk> - Laura Slater Textile Screen Print & Products

<https://printpattern.blogspot.com> - Print & Pattern Blog & Published Books

Book: Screen Printing at Home by Karen Lewis

<https://handprinted.co.uk> - Supplier of inks & screen printing equipment