

Lithography

Photocopy Litho Technique



Introduction

The Photocopy Litho process is an interesting and safe way to transfer images from a fresh laser photocopy. This process can be used to create simple lithographic prints or to transfer images to Lino and wood blocks for carving or onto an etching plate to create photo-etchings.

It is important that a laser photocopy is used and not an ink jet photocopy as the process requires the photocopy to be wet for the process to work. An ink jet photocopy will not work as the photocopy ink will run once it gets wet.

Photocopy Litho works in a similar way to traditional lithography in that oil and water repel one another. The oil-based ink sticks to the carbon 'black' areas of the photocopy and is rejected by the water/gum arabic saturated 'white' areas of the paper. For this reason high contrast black and white images work best as grey tones in the image will result in a muddy and undefined print.

As the process involves the use of a paper plate you may only be able to produce one or two prints from the plate before it breaks down.

Inking The Plate

There are two methods for inking the plate, each with its own advantages.

The sponge method, makes it easier for the beginner to achieve successful results. It is also ideal for working with small or detailed imagery as with practice you are able to control which areas receive more ink and pick out finer detail.

The brayer method, is more akin to the traditional lithographic process and is more suited to working with larger imagery of sizes up to A3. This technique takes some practice, but once you have control of it you can create some really exciting imagery.

The inked plates can be torn or cut and collaged together directly on the press bed, providing an immediate way to create collages or the used to create textured layers and combined with other processes.

The Sponge Method

You will need:

- 2x Cheap Sponges
- Container with clean water
- Etching ink
- Thin Plate-Oil
- Fresh laser photocopies
- Ink Knife
- Vegetable oil (for cleanup)
- Cloth Rags (for clean up)



Single colour print created with the Sponge Method.

01. Squeeze a 4cm slug of etching ink onto the ink slab and add a small amount of Thin Plate-Oil, using an ink knife mix it thoroughly with the ink.
02. Soak your photocopy in water for about 1 minute.
03. Remove photocopy from water, let excess drip off and place on a flat surface.
04. Dab a dry sponge in your ink - aim to build up a thin covering over one edge or corner.
05. Gently dab your inky sponge all over the photocopy (notice how the ink only adheres to the dry, black parts of the image and is repelled by the wet, white parts of the paper).
06. If your ink begins to stick to the white areas, dab a clean sponge dampened with a little water all over these areas to remove the ink.
07. Repeat steps 3,4 and 5 until a layer of shiny ink has built up over the black parts of your photocopy
08. Proceed to print it as described overleaf.

Tip: It is useful to use a different colour ink, other than black when first trying Photocopy Litho, as it helps you see where the ink has adhered to the black parts of your photocopy.

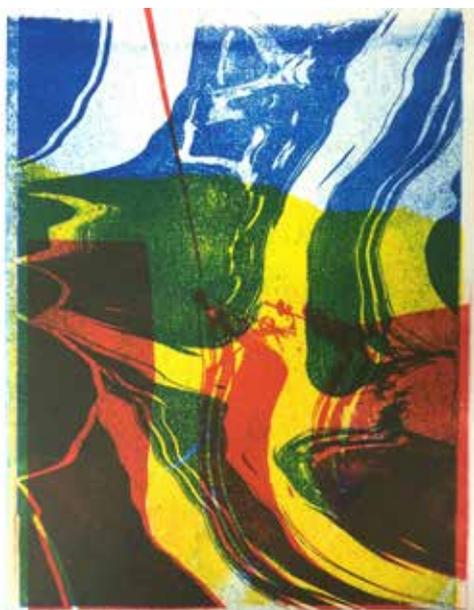
Health and Safety

To avoid skin contact with inks and solvents wear surgical gloves or barrier cream.

The Brayer Method

You will need

- 1x Yellow Cellulose Sponge
- Container with clean water
- Water sprayer
- Gum arabic
- Litho/relief ink
- Medium Plate-Oil
- Fresh laser photocopies
- Brayer (ink roller)
- Ink Knife
- Vegetable oil (for cleanup)
- Cloth Rags (for clean up)



Three-colour print using the brayer method.

01. Squeeze a 4cm slug of Litho/Relief ink onto the ink slab.
02. Squeeze out a pea sized amount of Plate-Oil, using an ink knife mix it thoroughly with the ink to create a syrup-like ink viscosity, adding more plate-oil a little at a time if required.
03. Using your ink knife pull out a line of ink the same width as the brayer and roll out the ink making sure to create a uniform coverage of ink on the table.
04. The ink should have a slight hissing sound when being rolled as well as a velvety texture. If the ink is too 'wet' on the roller it will be difficult to remove excess ink from the photocopy.
05. Spray water on a clean work surface so that when you place the paper down the entire bottom of the paper will be saturated with water.
06. Set the photocopy face up on the water and spray the surface of the paper with water. Ensure all the paper is wet.
07. Pour one tablespoon of Gum Arabic onto the middle of the paper.
08. Get the sponge wet and wring out the excess water and delicately sponge the Gum Arabic over the surface of the photocopy.
09. Wipe up any excess water/gum from around the edges of the photocopy with a clean cloth rag.
10. Carefully roll the ink, with some pressure, onto the photocopy. Start rolling on the photocopy as opposed to off of the photocopy. If you start rolling on the table then make contact with the paper, the photocopy will roll up on the brayer and tear.
11. Be sure to wipe up any excess gum arabic from the brayer as this will deter ink from being attracted to it.
12. Wet the sponge and wring out the excess water again.
13. Delicately wipe over the photocopy image without applying too much pressure. You should start to notice that the ink is being removed from the white areas of the photocopy.
14. It may take a few more roll-ups of ink before the image will print well. Just experiment until you find the best recipe.
15. Before printing the image, make sure you do one last sponge wipe after your last ink roll-up.

Health and Safety

To avoid skin contact with inks and solvents wear surgical gloves or barrier cream.

Health and Safety

Improper use of the press can cause serious injury and damage the equipment.

Always ask the technician to set the press for you.

Printing

For best results the Photocopy Litho should be printed on one of the etching presses, to print using the etching press:

01. Carefully lift the inked photocopy and place it face up on the press bed.
02. Ensure you have **Clean Hands!** Dirty hands damage the press blankets and leave finger marks on your printing paper.
03. Position the printing paper on top followed by a sheet of clean newsprint and the press blankets.
04. Wind the bed through the press, fold back the blankets, remove and dispose of the newsprint.
05. Carefully remove the printing paper from the paper plate and place it in the drying racks.
06. If you don't wish to keep your paper plates fold them up and put them in the regular waste bin. Otherwise leave them to dry on the drying racks.
07. Clean the press bed with Mr Muscle after pulling each print.

Clean Up

01. Put on a pair of (Black) Cleaning Gloves.
02. Scrape the excess ink off the slab with your ink knife and wipe it onto phone book pages.
03. Pour a small amount of vegetable oil onto the slab. Roll the brayers in the oil until the ink begins to dissolve.
04. With a dirty rag, wipe down the brayers and ink knives. Ensure you remove all the ink, especially from the edge of the rollers. Give them a final wipe with a clean rag.
05. Use the same rag to wipe up the oil and ink on the slab and then put it in the appropriate red bin.
06. Use Mr Muscle and a blue J cloth to clean up the oil and ink residue on the glass slab. Also clean down the press bed and tympan with Mr Muscle.
07. Rinse out your sponges with clean water and leave to drain by the sink along with the containers.
08. Put everything back in its place. Newsprint, inks, bottles, rollers etc!

Thank you for leaving the studio clean and tidy for the next person!