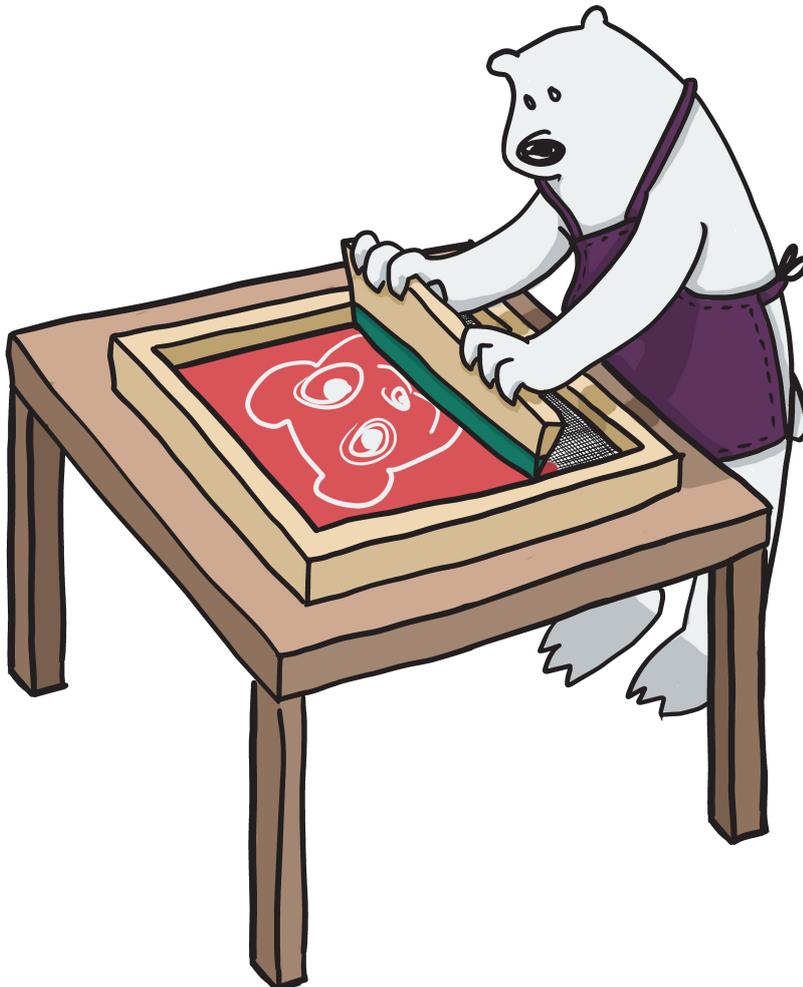


**FANZI
NEVE
RKST
ADEN**

**INSTRUCTIONS FOR
SILKSCREEN
PRINTING**



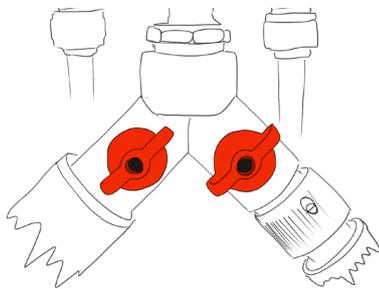
PREPARE YOUR WORKSPACE

1A Prepare your image, print it on paper and copy it to laser film (transparent paper). It may sound unnecessarily complicated, but it definitely produces the best results with our printer at Fanzineverkstaden.

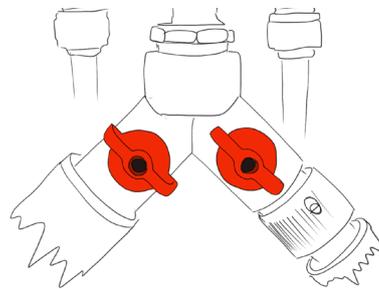
Ask the staff to set the paper feed in the printer before printing.

1B if you have a newly bought, unused frame, clean it thoroughly before use with AQ-3 (degreaser) on both sides. Rinse and dry it in the drying cabinet.

2 Make sure the taps are set correctly on the double nozzle with the two orange knobs so the water comes out of the hose and remember to always turn off the faucet in the usual way when you are done, never with the double nozzle. If the water keeps filling in a closed hose it may explode. Don't forget to use ear protectors when rinsing the screen, and you'll find aprons in the bathroom as well.



Water comes only through the hose



Water comes only through the tap

3 Prepare the bathroom, move the drying rack, make sure the taps are set correctly as above, set up the coating table, detergents and tools.

4 Prepare the printing table, squeegees, test- and printing papers, paper towels, containers and plastic cups (to lift the frame from the table). Choose and/or mix the colors you want to use. Empty containers for this purpose are stored in the same cabinet as the paints.

5 Prepare the drying cabinet (clean it if necessary), the exposure unit, clean the glass-plate and check that the heater is in place.

Now you're ready for coating!

COATING

Emulsion (AQ-1) is stored in the refrigerator.

Weigh the emulsion container before using it and again after using it to get the right price.

Prepare your screen with AQ-1, the photosensitive emulsion that is the base of your template.

The advantage the AQ-system is that coating and other handling of exposure-materials can be done under normal room lighting. So you don't have to use a darkroom.

However, avoid sunlight and UV lamps. Therefore, DO NOT work with coating and exposure near a window or near the UV lamp when lit.

1 Pour a generous amount of AQ-1 into the coating tray. Don't skimp, it will only result in unevenly coated screens that you'll have to re-coat. Scoop any left-over emulsion back into the container with a scraper.

2 Keep the screen frame angled as shown.

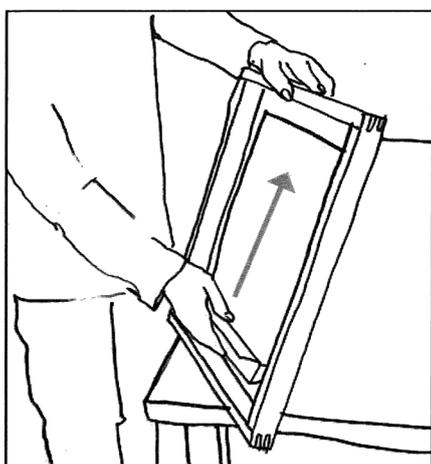
Position the coater so that it lies against the clean and dry screen. Angle the coater until the emulsion fluid touches the screen along the entire coater width and drag the coater up with a firm stroke. Keep contact with the screen all the way. Stop a few centimeters from the frame edge and angle the coater so that the emulsion flows back into the coater. Coat on each side so that the entire screen is covered with an even, thin layer of emulsion.

3 After that you scrape, i.e. pull the coater just like when you coated the screen, but this time you angle the coater so that no emulsion runs along the screen. The coater now scrapes up excess emulsion and smooths out the thin layer that's left on the screen. Scrape 4 times, alternating between the front and back side.

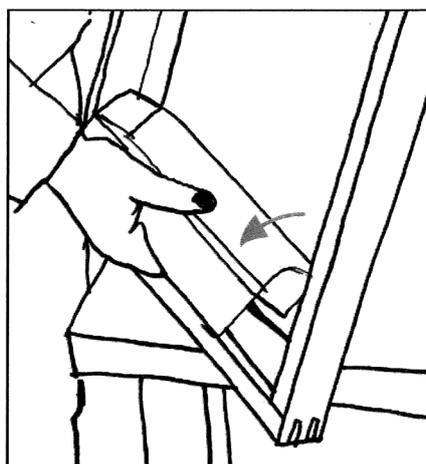
4 Dry the coated screen in the drying cabinet.

Turn on the timer before switching on the heater. Press both buttons on the heater and make sure the heater is 7-10 cm away from the funnel.

Let's burn this baby!



Coating



Scraping

BURNING

If you have a larger frame than those with an A3 printing surface, raise the lamp a couple of centimetres and extend the burning time. You also need to create an exposure board the same size as the frame. Contact the staff to get help with this!

- 1 Place the frame on the exposure board, bottom up so that the frame embraces the board and the screen is snug against the board.
- 2 Place your transparent image on top of the canvas. Make sure it's mirrored.
- 3 Place the glass-plate on the image and frame (make sure it is clean and dry).
- 4 The motif is now pressed against the canvas and the black felt of the underlying board lies directly against the canvas from below. This gives a sharp and accurate copy on the canvas and prevents the UV light reflecting or filtering under the edges of the transparency film.
- 5 Set your timer according to the timeframes mentioned below and burn.

If you have a new frame, double check your screens fabric density (40, 60, etc).

Burning times:

40 screen about 7½ min

60 screen about 5½ min

80 screen about 3½ min

100 screen about 2½ min

These times are estimates because the burn time depends on the distance between the exposure board and the UV lamp, the transparency films light barrier and the images composition (thin lines require shorter burn time, large fields require longer time), etc.



- 6 After burning, turn off the UV lamp, remove the screen and rinse it with **cold water on the exposed (burned) side**.

The part of the screen that is covered by black on the transparent film is not exposed to UV light and will come off, while the exposed emulsion has hardened into a stencil on the screen.

If the stencil washes off in the exposed areas while rinsing, then the burn time was too short. Wash your frame according to the cleaning instructions, redo the coating and extend the burn time by 30 seconds (or 15-20 seconds for screens with a mesh count over 80).

- 7 Blot the frame on both sides, preferably with newspaper. Put a newspaper flat on the wet screen and gently pull it away. This removes most of the water and unexposed emulsion that remains after the rinse process (underexposed emulsion may otherwise clog parts of the stencil during drying).
- 8 Dry the screen in the dryer cabinet (takes about 15-20 min).
- 9 Burn the frame again.

Your stencil is ready! Let's print!

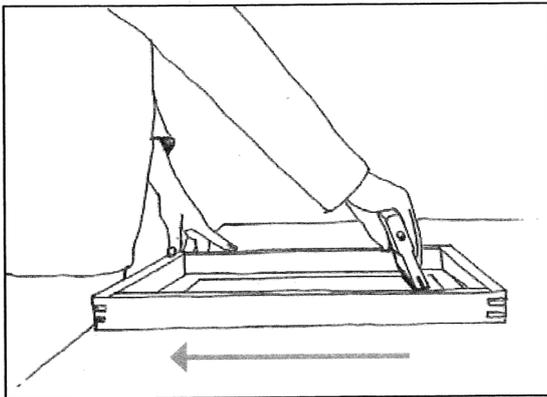
PRINTING

Attach the frame to the printing table hinges or attach the removable ones to any table.

Align the frame to the paper using your transparent film.

FILL THE SCREEN

Lift the frame and pour a generous amount of ink into the far edge of the screen, this will be your ink well during printing. Don't skimp, it will only result in uneven printing. You can easily return left-over ink with a scraper when you're done.



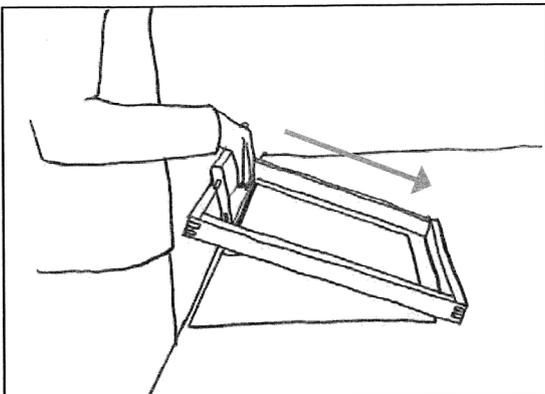
Squeegee stroke

SQUEEGEE STROKES

Do a pull stroke by pulling the squeegee steadily towards you.

Lift the squeegee and, if necessary, take some more paint from your paint depot, and do another pull stroke towards you. Sometimes one stroke is enough, sometimes more is needed for the print to be properly colored.

ALWAYS start by test printing on a material similar to the one to be used so you see how the paint and stencil behaves. Do many test prints to ensure better print results.



Flooding the screen

How you pull the squeegee is absolutely crucial to the print result. A smaller angle between the squeegee and the screen gives an increased color flow while a more upright pull stroke gives less color. Use trial and error.

FLOOD THE SCREEN

When you're done with a print, before you switch paper, lift the frame and flood the screen with ink by doing a push stroke instead of a pull stroke. The ink will be returned to your ink well and you have an even ink layer for the next print. Place a support under the screen so that it is lifted off the table (use a plastic mug,

wooden block, toilet roll, you name it), otherwise it will touch the surface and the next print will be uneven. Also do this when you need to take a small break. Spray some water on the flooded screen to prolong the break time.

When you are done with the printing, scrape up the remaining paint and return it to the container.

If you do a lot of prints, you will notice on the print result when it is time to rinse the ink from the frame and start over with a new ink well. The same applies when the stencil has done its thing and starts to loosen from the screen.

Time to clean up!

CLEANING

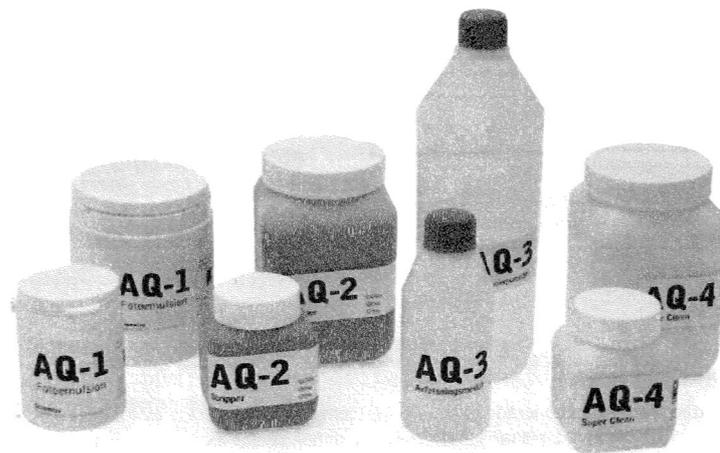
Rinse the frame immediately, don't let it dry because the paint will get stuck in the screen and become very difficult to remove, often ruining it in the process.

Dip a dish brush in AQ-2 (Stripper) and scrub thoroughly on both sides of the screen until the photo emulsion dissolves. Spray AQ-3 (Degreasing). Continue working on both sides of the screen. Finish with rinsing with hot water and a strong jet. We also have a high pressure washer if needed.

NOTE! Don't stop the cleaning process. If the photo emulsion is not rinsed, it hardens again after about 20 minutes and is then very difficult to remove.

Allow the frame to dry before re-coating.

Don't forget ear protection and apron when rinsing!



CHEMICALS

We use Screentec's products because they are easy to use and do not require special lighting when coating.

AQ-1 Photo Emulsion

UV light sensitive emulsion to produce photo templates.

AQ-2 Stripper

Removes the burned photo emulsion from the canvas.

AQ-3 Degreasing

Added together with AQ-2 to make the screen cleaning more efficient. New screens are cleaned with degreasing and hot water before use.

AQ-4 Super Clean

Used to clean heavily soiled frames and to remove ghost images.

WARNING! CORROSIVE! Talk to the staff if you need to use AQ-4, personal instructions are available.

SILKSCREEN AT FANZINEVERKSTADEN

We have:

- one permanent table with 2 printing stations + 2 movable printing stations
- one simple drying cabinet for frames of max. (outer measurements) 50×70 cm
- exposure equipment
- transparent film (A3)
- coating station
- washing station
- paints for paper and textile
- UV emulsion
- chemicals for cleaning and degreasing
- printing paper

You need to bring your own frames and squeegees, we only have those to lend during workshops.

You can buy silk screen frames and squeegees at Drewex or Matton in town, but they order theirs from Screentec, so you can save some money by ordering from them yourself.

The biggest frames from Screentec that will fit in our drying cabinet are "Screenram i trä MA" (wooden frame, outer measurements 42x56cm) and "Screenram i aluminium" (aluminum frame, 50x60cm).

You can bring your own silkscreen ink or use what we have at Fanzineverkstaden. At the moment we have inks for printing on paper in green, red, yellow, blue, black and white + ink for printing on textile in black.

Current price list (based on cost price)

- ink = 0.37 kr / gram
- emulsion = 0.60 kr / gram
- transparent film A3 = 6.10 kr / pc

To find out how much you use, you need to weigh the container before and after you've taken what you need.

Cleaning and degreasing chemicals are free.

How does it work?

- You need to be a member of Fanzineverkstaden (register at the website).
- You need to have previous experience.
- If you've never used silkscreen before, you can attend one of our workshops.
If you don't find one scheduled at the website, you can use the contact form to request one and we'll get back to you.
- You need to reserve a time slot in our booking system, as for everything else.
- You can normally keep your frames and squeegees at Fanzineverkstaden, as long as there is room for them.

Have fun!

Screen printing, also called serigraphy, textile printing or silkscreen, is a printing technique for manually making several copies of an original image. Each copy may differ a bit and can be done in different colors.

The technique can be used for single image prints or for printing books, with one or more colors depending on the number of frames you use.

We were inspired by the **CRACK!** festival for printed and temporary art in Rome, where there are many examples of silkscreen being used for comics-related material, and want to facilitate and encourage more artists in Sweden to do the same.

Some examples of collectives/places using silkscreen for books and art are **Le Dernier Cri** [FR], **Le Garage L** [FR], **Matrijaršija** [RS], **Forte Prenestino** [IT] and more, now also including **Fanzineverkstaden** in Malmö.