



SILK SCREENING

MCCTC CBI Program

Tools of the Trade

- Screen
- Emulsion
- Film Positive (your image to be printed)
- Degreaser
- Scoop Coater
- Screen Printing Ink
- Squeegee
- Emulsion Remover
- Haze Remover
- Flash Drier
- Light Source
- Washout Sink

Screen

- Frame size is dependent on the size of your image but for our program we will be using a screen size of 20x24.
- Mesh count is dependent on the detail of the image, what is being printed on, and the type of ink being used.
- Mesh Count: a measure of how many threads of polyester (used to be silk, centuries ago, hence 'silk screening') cross each other per square inch of the screen.
- I just say, "how big the squares are that the ink goes through."

Screen Sizes

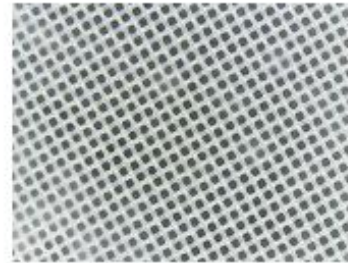
Screen sizes

- **The Lower Mesh = More ink, less detail - Higher Mesh = More detail, less ink**
- **24-90 Mesh** - Most commonly used for thick specialty inks, such as glitter, puff, etc.
- **110 Mesh** - Most commonly used for white ink.
- **155 Mesh** - Most commonly used for black ink.
- **200 Mesh** - Most commonly used for high detail artwork. Good for solvent and water based inks. Ink may need to be reduced/thinned.
- **230-305 Mesh** - Most commonly used for super fine detail artwork, half tones, CMYK process printing, as well as solvent and water base inks

Screen



Mesh under microscope at 50x zoom



110 mesh



196 mesh



230 mesh

Emulsion

Emulsion is the chemical we will use to put the image that we want to print onto the screen.

Emulsion is light sensitive and will develop with exposure to light.

There is a small window of time what we can use it. Once it is exposed to a light source it is no good.

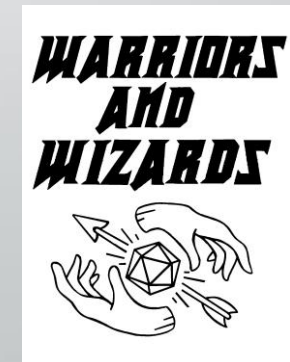
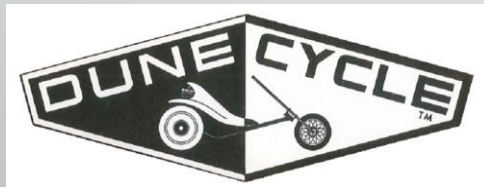
We use XENON because it is premixed and easy to use.

[This is how to apply emulsion to the screen.](#)



Film Positive

This is the image
that we want to
print.



Scoop Coater

Tool used to put
emulsion on to
your screen



Ink

The ink that you use is based on what you are printing on and how durable you want it to be.



Plastisol -Very durable but you must use a drier to cure it.

Water Based-Less durable (washes out) but dries without a drier.

Squeegee

Used to push your ink through your screen to the item you want to print on.



Flash Drier

Used to “cure”
Plastisol ink.



Chemicals

Emulsion Remover-used to clean emulsion off of your screen.

Haze Remover-use to remove ink stains that may be left over after you have cleaned it. (ghost stains)

Degreaser-used to prepare your screen before you put the emulsion on it.

Ink Remover-used to remove the ink from the screen