**Photopolymer Plate Intaglio Process @ WMU**

This is a photographic process using a transparency to expose a photopolymer plate that will be able to be printed via an intaglio process.

The process works in a positive manner. That is, the areas that are dense (opaque) on your transparency will actually wash away in the development process and create a crevice that will receive ink in an intaglio manner of printing. The areas that are transparent on the transparency (clear) will harden the plate and will be able to be wiped with tarlattan. It is necessary to expose the plate a third time because the areas that were opaque need to also be hardened after exposure.

1. Exposure:
   a. Turn on the integrator by pressing “POWER” and allowing the light to be fully warmed up (3 minutes) if you are the first person to use the OLEC 35, otherwise the unit will be already on.
   
   b. The first exposure is to a stochastic (also called aquatint) screen which places a random dot pattern that allows the intaglio to hold on to darks and medium tones. Input on the integrator your desired exposure cycle by directly pressing the numbers on the keypad, it is reading light units (1 light unit is roughly equal to 1 second when the lamp is brand new). Exposure time is around 80 light units on the OLEC). Vacuum at around 25 psi. Press the “START” button to open the shutter on the lamp and the light will turn on for the requisite exposure cycle and then shutter will close again, make sure the light reader is not being covered by the curtain! The lamp will go into idle mode, this is normal.

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c. Second exposure is to the actual transparency (artwork), remove the stochastic and replace it with your image. return stochastic screen to the drawer between the cover sheets! Input between 70-90 light units depending on density of the image. - vacuum around 20-30 psi. Press start once more.

d. The third exposure happens after Development and Drying.

2. Development:
   a. After the exposure the plate needs to be washed with warm water in the sink for 2.5 minutes using the soft brush to take out the soft areas of photopolymer and create the crevices that will receive ink in the intaglio process. Use the timer.

3. Drying:
   a. After Development you must immediately dry both sides of the plate using towels and a hairdryer.

4. Final Exposure:
   a. Third Exposure can occur at this time, expose the plate to pure light to harden the soft areas of the plate. Place the plate on top of the glass and expose for around 300 - 400 light units (about 5-7 min.).

5. Print as an Intaglio using the magnet as a base to make it easier to wipe the plate.

Some issues:
- if your transparency is not of good quality and too light the light will go through the transparency and harden most of the plate hence your print will be light or very hard to see.
- If your transparency is too dark, too opaque areas of very heavy dark will wash away without a dot pattern and will create a large (flat) crevice that will not be able to hold on to ink and it will print similarly to an open bit intaglio plate.
- Transparencies can be purchased from the Printmedia area 11 x 17 or 17 x 22 to be printed on the inkjet printer. Transparency needs to be black and white (greyscale) and only printed with black ink, please make sure opacity is around 96% for your flattened image.

If you are the last person at the end of the day to use the unit or if no one will use the unit for the next three hours turn off the unit by hitting POWER on the integrator, if someone else will be using it please leave the integrator ON.

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