

1. Bevel and Burnish the Zinc Plate

- Using a scraper tool, scrap the silver side of your zinc plate to a 45-degree angle.
- DO NOT BEVEL THE ENAMEL SIDE
- After scraping the edges, use a burnisher to push down and flatten the rough edges until the bevel feels smooth.

2. Degrease the zinc plate

- Wearing gloves, Degrease and clean the plate with whiting and tap water
- Rinse plate with clean water and dry with a paper towel

For Hard ground line-etching technique: Applying the acrylic hard ground:

- Wearing gloves, hold plate straight up in tray marked "acrylic hard ground"
- Carefully and slowly, pour the hard ground from the silver side of the top of the plate back and forth down the plate it drips down the plate and into the tray until the plate is covered.
- Lift the plate out of the tray and carefully place it face-up (area covered by the ground) onto a couple of sheets of phone book or newsprint.
- Pour the excess ground from the tray BACK into the bottle of acrylic hard ground
- Rinse the tray and funnel with hot/warm water and leave to dry upside down
- Take your zinc plate to the "hot plate" and place it down on top of brown paper covering the metal surface of the mechanism
- Flip the switch on the right side of the machine to turn the machine "on" and turn the thermostat to 250 degrees F
- Wait 5 minutes or more until your covered plate is completely dry.
- Carefully remove your plate from the "hot plate" and let the zinc plate cool at your work area.
- If no one else is using the "hot plate" turn off the machine at both the thermostat and side switch
- Needle your image onto the plate carefully removing the ground but not incising the plate.
- Once you are done needling, place the incised plate in the etching bath.
- Etch for 5 minutes and use a feather to remove the etched metal bits from the lines of your plate.
- Remove plate and place in water tray. Rub over the plate with your gloved hands to push out etched metals. DO NOT WASH PLATE IN THE SINK OR RUN WATER OVER THE PLATE.
- Do a soda ash bath to remove hard ground from the plate.

For Aquatint Technique

- Once you've etched your lines with the hard ground, you will need to cover all areas of the plate that you do not want to etch again—meaning the lines you've created and or areas that you want to remain the color of your paper.
- You coat the etched lines and areas of the composition that must remain white in the print by adding a tint of color (use tempera paint) to a small amount of the acrylic hard ground into a cup and paint the ground onto the plate creating a mask. You will need to allow each layer of hard ground to dry between multiple applications.
- The more applications of hard ground, the more coverage you get, i.e. the less likely it will be that the etchant will bite your plate, or the "whiter" your area in the composition will stay.
- Once the applications of masking hard ground are dried to the plate (you can do this by allowing the ground to air dry or place each layer on the "hot plate," you will apply the spray paint to the plate to create the aquatint effect.
- Take your plate to the etching room and lean the plate against the back wall of the ventilation area. Carefully spray your plate with enamel-based spray paint.

REMEMBER:

- More dots of spray paint create a lighter area of value
- Less dots of spray paint create a darker area of value

DO NOT COAT YOUR PLATE WITH SPRAY PAINT COMPLETELY. YOU WILL REGRET THIS.

- You want to have DOTS so the etchant will bite the metal around the dots so you have a stippling effect in your print.
- After you spray the plate, allow drying for 5-10 minutes.
- Place in the etching bath.
- Etch for 5 minutes.
- Remove plate and place in water tray. Rub over the plate with your gloved hands to push out etched metals. DO NOT WASH PLATE IN THE SINK OR RUN WATER OVER THE PLATE.
- Do a soda ash bath to remove the spray paint and hard ground from the plate.

SODA ASH BATH

- In the tray marked "Soda Ash Bath", run warm/hot water from the tap covering just the bottom of the tray (enough to just cover your plate).
- Add 1 TBSP of Soda Ash (located in the bucket labeled "Soda Ash") to the warm/hot water.
- Mix into the water to dissolve.
- Place your plate into the solution and scrub away the ground or spray paint from the surface of the plate. This may take up to 2-5 minutes depending on how much ground or paint you have on your plate.
- Rinse the plate with tap water and dry with a paper towel.
- Dump the tray into the sink and rinse with tap water.
- Allow tray to dry at side of the sink.

Dry Point

- Incise your plate directly with the needle. There should be NO ground on the plate (meaning acrylic hard ground or spray-paint).
- This will create soft lines because the burr that is made when you strike the plate directly with the etching needles.
- You MUST do this LAST—if you place your incised lines into the etchant, the etchant will remove your burrs.

Before you print your edition—re-bevel and burnish the edges of your plate so your images have clean plate marks.