

PROCESSING LIQUID POLYMER

EQUIPMENT AND SUPPLIES REQUIRED

EXPOSURE UNIT - SYSTEM 1010; SYSTEM 1020; SYSTEM 1200; SYSTEM 2200
POLYMER RESIN - Ideal i40
COVER FILM, SUBSTRATE, DAMMING TAPE
PROCESSED NEGATIVE - Ideal AQ, RA, or equivalent.

PROCEDURE

1. Place the processed negative onto the bottom glass plate ensuring that the negative is right-reading.
2. On the System 1010 or system 1020 wet the glass around the negative using a cotton bud
3. Cut a piece of cover film large enough to cover the negative and the wet area on the System 1010 or System 1020 or large enough to cover the lower glass (including the vacuum grooves) on the System 1200 and System 2200.
4. System 1200 and System 2200 only - turn on the vacuum pump to evacuate the air under the cover film.
5. Gently smooth any creases or air pockets that occur by hand. A dry, unused paint roller is excellent to achieve the desired effect.
6. Construct a frame around the image area using the damming tape keeping at least 5 mm outside the image area. It is necessary to leave a small gap in each corner to allow excess polymer to escape.
7. Pour the polymer resin into the framed image area. About 75% of the framed area needs to be filled. Air bubbles will rise to the surface where they can be easily punctured with a pin or toothpick or with an air tool.
8. The substrate should be large enough to cover the dammed area with at least 10 mm overhang. To place the substrate on the polymer hold each end of the sheet and allow the centre to hang down in a U shape. Lower the substrate onto the polymer and slowly lower each end. If it is necessary to adjust the position DO NOT lift the substrate but slide it into place.
9. System 1010 and System 1020 - Place a spacer bar at each end of the lower glass then place the upper glass over the substrate being careful to align the top glass with the lower glass.
System 1200 and System 2200 - lower the top glass onto the substrate.
10. System 1010 and System 1020 - Fit the clamps to either end of the assembly and slowly tighten the screws firmly.
System 1200 and system 2200 - Engage the spring loaded locks.

11. Pause for about one minute to allow the polymer to flow over the entire area.
12. First exposure to the ultraviolet lights is the back exposure. This exposure will designate how much character depth will be on the finished product. 15 - 25 seconds is the recommended time. Turn the glasses upside down, place them back on the glass rests and activate the timer.
13. Once the back exposure is complete , turn the clamped glasses over and expose the front for 3 minutes.
14. Remove the top glass and lift the polymer plate off the negative. Peel the cover film off the polymer. It is now ready to place in warm water and wash out the characters with a
15. After the plate is washed free of all unexposed resin, rinse with tap water and submerge in a posting solution and expose to UV light for a minimum of 8 minutes. This time is important as under posting can effect the durability of the die and the ability to properly transfer inks for a clear sharp impression.
16. Hand dry the plate with a paper towel, then further dry the plate using warm air no greater than 35 degrees centigrade.