

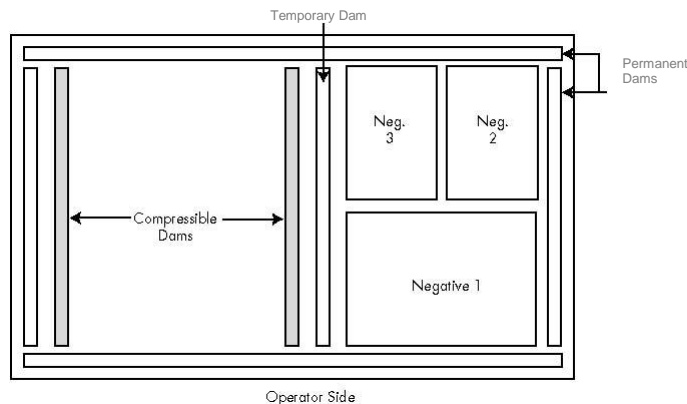
Tech Tip 110

Partial Plate Procedures for Manifold Units

Occasionally there are not enough negatives to fully cover the lower glass of the exposure unit. In order to conserve resin, a partial plate can be made. Below is a procedure for making partial casts using the MacDermid Liquid Photopolymer Platemaking System. This is written for use with dual- or single-manifold units and for systems using a PanelMate[®] control system.

PROCEDURE

- 1) Partial plates are made using the right (from operator side) end of the lower glass. The negatives should be positioned from right to left, filling the glass from front (operator side) to back. The full-sized plate dams should remain in place.
- 2) Once the negatives are positioned, a temporary dam (see the figure below) is placed from front to back two (2) inches to the left of the negatives. The thickness of the dam should be the same thickness used for normal full-sized plates. The two dams made of compressible material, with the thickness slightly less than the total plate thickness, are then placed to the left of the temporary dam and to the right of the permanent dam as shown below.



- 3) Pull the cover film over the lower glass and turn on the vacuum to pull down the cover film and seal the entire area.
- 4) With the manifold in the manual mode, move the carriage to the left as you would for a full-sized plate. Insert a full substrate and move the carriage to the right until the doctor blade is positioned approximately one (1) inch to the left of the temporary dam.

- 5) Put the manifold back into automatic mode.
- 6) Cast the plate normally.
- 7) Lower the upper frame and activate the exposure cycle using top vacuum as normal.

FOR UNITS WITH PANELMATE® CONTROL SYSTEMS

- 1) Complete Steps 1-3 as stated above.
- 2) Select “CARRIAGE INDICATOR” on the PanelMate® screen and move the carriage into position one inch to the left of the dam.
- 3) Feed the substrate under the laminating roll and pull it back to the left end of the exposure unit glass, covering the compressible dams and vacuum groove.
- 4) Select Auto Mode, “DISPENSE EXECUTE,” then initiate “RESIN DISPENSE.” The carriage will dispense resin over the negatives.
- 5) Complete the platemaking process as normal.

Note: The compressible dam material is used to support the substrate to ensure contact with the upper frame vacuum grooves so that adequate upper vacuum can be drawn in the areas where no resin has been dispensed.

