MANUFACTURING BULLETIN



PROCESSING METAL BACKED POLYMER

EQUIPMENT AND SUPPLIES REQUIRED

Plate making Machine - Ideal System 1004 - For best results warm the lamps for 5 minutes prior to the first exposure. Metal backed polymer plate - MX-145 or similar. **Processed Negative**

PROCEDURE

- 1. Place the metal backed polymer plate in centre of the vacuum table.
- 2. Place the negative face down (right reading) emulsion side to the polymer plate.

UV Rays Cover Film (with vacuum suction) Film Negative Emulsion side down (right reading) Polymer Metal Backed Plate Note: The negative must not be larger than the Vacuum Table polymer plate. (an overhanging negative can cause image distortion near the edge.) Correct Wrong Negative . Hard Polymer Plate

- 3. Place the cover film over the negative and the hard plate.
- 4. Turn the vacuum pump on and check that the cover film is sealed around the edge.
- 5. Starting from the centre push out in all directions across the cover film with hands or roller making sure that the cover film is smooth and tight over the negative and plate. It is imperative that no air remains trapped under the negative.
- Set the timer for the UV Exposure. We recommend the following range to begin with: 6.

| Daylight Negative | Darkroom Negative |
|-------------------|-------------------|
| 109 - 132 Seconds | 216 - 264 Seconds |

Note: Depending on the model of the plate making machine, the age of the UV lamps (intensity) and the density of your film (darkroom only): the exposure time can be slightly more or less. The times given above are an approximate range only.

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- 7. Once the exposure is complete remove the metal plate and negative from the exposure machine.
- 8. Separate the negative from the plate and store in a safe place for future use.
- 9. Place the plate in a suitable tray and cover with warm water. Best results are obtained when the water is preheated to approximately 35°C
- 10. Hand wash for a minimum of 5 minutes making sure that all areas of the plate are brushed in a light circular motion.

Note if an orbital washout machine is available washing for 3 to 4 minutes at 35°C produces the best results.

- 11. Once the washout is complete, rinse the plate with clean water then pat dry with paper towel or a lint free cloth immediately. Alternatively remove excess moisture with compressed air or a hair dryer.
- 12. If an oven or plate drier is available set the temperature to 80° to 90°C. If not preheat the vulcanising press to its normal operating temperature.
- 13. Insert the plate and leave for 10 to15 minutes.
- 14. Allow plate to cool to room temperature.

DO NOT POST EXPOSE UNTIL PLATE COOLS TO ROOM TEMPERATURE

- 15. Place the plate back in the exposure draw polymer side up (do not use the cover film) and turn on the UV lamps.
- 16. Post expose for 30 minutes.
- 17. Remove the plate and allow it to cool to room temperature.

ALLOW THE PLATE TO COOL TO ROOM TEMPERATURE PRIOR TO USE