

+ Plate Masking Fine Detail or Screens: 3040/3048 Non-Panel/Mate®

Tech Tip #118

Creating
solutions
that flex.

The ability to hold fine detail in a printing plate is directly related to the relief in that plate. Finer detail can be achieved in the plate when relief height is reduced. Enhancing this ability to hold fine detail can be achieved with a process known as plate masking. Plate masking allows the reduction of the relief height in only those areas with fine detail, thereby allowing maximum relief in all other areas of the plate.

Making a mask

A single mask can be made for one negative and then can be stored with that negative for future usage. Masks can be made from any material that will block the transmission of UV light. Place the platemaking negative on a light table and cover it with any UV opaque material. Mark the image areas of the negative on the mask and remove those areas.

Using the mask

Terms:

- T1 First background exposure time
- T2 First relief exposure time (80% of total)
- T3 Upper vacuum time (T1 + delay)
- T4 2nd background exposure time (bump)
- T5 2nd relief exposure time (20% of total)

Recommended Procedure:

1. Complete the normal back exposure cycle (T1) and 80% of the face exposure (T2). Make sure upper vacuum is used during this procedure (T3).
2. Leaving the lower vacuum on, raise the upper frame and tape the mask into place over the substrate in register to the negative.
3. Place a 20-mil shim on the shim pack as a spacer. (This shim must be thicker than your masking material.) Lower frame into place.
4. Reset back exposure timer for bump exposure time (T4).
5. Reset face exposure timer for 20% relief exposure time (T5).
6. Push exposure button.
7. After exposure, raise the frame and process the plate.

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