Hot Stamping Plate Making Process

Plate or die making is the key of hot foil stamping. Water soluble photopolymer plate is currently the simplest, fastest and least—cost plate making method.

This photopolymer plate has two layers: the upper layer is photopolymer plate about 0.03 inch thickness, part of it will solidify after UV exposure, while the rest part without exposure can dissolve in the water. The lower layer is aluminum plate, about 0.008 inch thickness.





1. Design on computer and print the image

1)Images are white and other parts are all black, design image according to needed size in proportion as 1:1

Print after transform it to the below image

- In order to ensure the effect of platemaking, when using laser or ink-jet printing film, please print positive image
- 3) Black part must be black enough, in the print settings you should set the most sophisticated black-and-white printing to ensure that the black part is opaque with the best quality. It is better for customers who use a laser printer to use original cartridges, for domestic cartridges added later is not black enough which can also affect the quality of the plate.



2.Cut plate

According to the size of the designed image, cut off the plate which is larger than the image with our special cutter.

Important tips:

- 1) While cutting plate, you should try to avoid strong light.
- 2) The edge of the plate cut down cannot be curled, and you must keep it flat with layout, or it will cause untightly touch with transpaency.



3.Paste the film

Paste printing side of transparency with the plate, and adhere the edge with transparent tape tightly.

4.Expose

Place the plate on the UV exposing machine with suitable pressure above to ensure that the plate closes to the glass tightly.

Set time for 40 seconds using ASC exposing machine. Turn on the switch, when the time is over, ultraviolet light is off, the buzzer rings, then turn off the switch. Take out the plate.

(If you use other types of exposing machine, please do experiments in advance to master the best time of exposure.)

Remove the film.

5. Wash the plate

Place the plate into warm water about 104-122F ($40-50^{\circ}C$), and brush the surface gently with a soft brush. Firstly, you should brush a few times rotating in clockwise direction, then brush in reverse direction a few times. Brush the parts between lines carefully.



After the needed image is left on the plate, the other part is dissolved (sometimes we can directly see the aluminum at the bottom of the plate) and the image becomes clear.

6.Solidify

Place the plate on the ASCexposing machine again, set time for 60-80 seconds, solidify again.

Finishing the above step, plate making is finished and can be used to press.