

Tech Tip 22

Using Membrane 200

Membrane 200

Membrane 200 is a consumable for use with MGS digital flexo plates and MGS LUX laminators. Membrane 200 is used to impart a random recessed texture to the surface of a MPS flexo plates. It can be used in place of Membrane 100, subject to certain process changes required to get good lamination to the plate surface.

Membrane 200 uses a lamination speed of approximately 0.95 feet per minute. A full 50x80 digital plate will require up to 7 minutes to laminate. This slower lamination speed is necessary to achieve intimate contact of Membrane 200 with the plate surface. This speed dial is set to something between 0.75 - 1.

Unlike Membrane 100, which is transparent and clear, Membrane 200 has a matte finish and translucent or milky appearance. However, after it is properly laminated to a plate it will look clear in nature, similar to that of Membrane 100.

Figure 1 below shows the appearance of a Membrane 200-laminated plate with proper adherence (gloss black of the mask and polymer color of the plate). Figure 2 is a close-up of a Membrane 200-laminated plate with inadequate adherence, showing the uneven cloudy appearance indicative of poor adherence.



Figure 1



Figure 2

Poor lamination is usually caused by one or more of the following processing conditions:

1. Incorrect speed of lamination, usually by going too fast. Correct by timing a full length plate to attain the proper speed stated above.
2. Inadequate Impression of lamination roller. If using new “LUX” laminator, reset the zero point and plate thickness setting. If using a “62 Pro S” reset the gap setting or increase impression by turning the impression wheel clockwise 1/8 to 1/4 turn.
3. Inadequate lamination roll tension. Correct by increased tension.
4. Low lamination roller temperature. Correct by confirming the correct temperature of 230° F. (110° C).
5. Low spots in the sled. Minor variations in thickness can be compensated for by increased impression.

Detailed procedures for setting speed, gap, and impression can be found in the MacDermid LUX Operation Manual provided when the LUX system was installed.

As long as the mask layer has not been damaged, i.e. wrinkled, folded or scratched, you may relaminate the same plate after determining and correcting the lamination errors. It is not recommended to relaminate a plate more than once.

If you have any questions, please contact MacDermid’s Technical Service department at 1-800-348-7201.

