

**THE**  
**GBC**<sup>®</sup>  
**LAMINATION**  
**COOKBOOK**

Provided For The Use Of Beer Wholesalers By General Binding Corporation

**THIS LAMINATION COOKBOOK ASSUMES BASIC OPERATOR KNOWLEDGE OF A LAMINATOR SUCH AS SETTING THE ROLLER TEMPERATURE, SETTING THE SPEED, SETTING THE TENSION TO ELIMINATE WRINKLING, USE OF THE FOOT PEDAL IF APPLICABLE AND SETTING THE GAP FOR MOUNTING. SHOULD YOU NEED ASSISTANCE OR HAVE A QUESTION CONCERNING THE USE OF GBC EQUIPMENT OR SUPPLIES A GBC REPRESENTATIVE WILL BE HAPPY TO HELP YOU. CONTACT GLOBAL IMAGING TO FIND A GBC REPRESENTATIVE NEAR YOU.**

# **THE GBC LAMINATION COOKBOOK**

## **Thermal Laminating and Finishing Basics.**

### **Thermal Encapsulation**

- Threading the film onto the laminator.**
- Bringing the film out the back of the laminator.**

### **One Step Decaling**

- Using GBC thermal laminating film on front of the print and GBC Arctic Thermal Mount Adhesive on the back of the print.**
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### **One Sided Lamination Using Pressure Sensitive Film**

- Threading the laminator with pressure sensitive film.**
- Laminating a print**

### **One Sided Coating Using GBC' s NEW AccuShield Liquid Laminating Alternative (Excellent for coating vinyl banners)**

- Threading the laminator with Accushield**
- Coating a print**

# Thermal Laminating and Finishing Basics

Thermal Laminating Films are typically 2 to 4 times less expensive than pressure sensitive laminating films. You should use Thermal Laminating Films whenever possible in an effort to reduce cost.

Different thermal laminating films come wound on the core with the adhesive in or the adhesive out. The terminology for this is called Poly-In or Poly-Out. If the film is wound on the core with the adhesive in, this is called Poly-In. If the film is wound on the core with the adhesive out, this is called Poly-Out. (You should always take notice of whether a film is poly-in or poly-out). Typically, GBC wide format films are wound on the core poly in. Poly-In film should be loaded on the laminator to come off the bottom of the roll before entering the heated rollers (Or make sure the adhesive is facing you when it comes off the roll to the heated roller). All GBC films come with colored tape on the roll that indicates if it is Poly-In or Poly-Out. This is also noted on the box label and the core label.

It is important to know when laminating thermal inkjet prints, the recommended film temperature setting should not exceed 210° F. This requires using a Low Melt film with an operating range of 185° F to 210° F. Though higher temperature films may work with some ink and paper combinations, the results can vary more greatly than when using a Low Melt film.

The use of MicroPorous papers to print on can simplify the finishing process as this product provides greater flexibility for indoor and outdoor ink and lamination combinations.

Finally, there are exceptions to every rule. The best practice is to run a small test sample of paper, ink and laminate combination to ensure compatibility.

# **THERMAL ENCAPSULATION**

**This simply means to protect with thermal lamination all sides of the print and have a clear “sealed edge” all the way around the document.**

**This explanation of Thermal Encapsulation is based on the following product and laminator settings.**

- GBC Low Melt UV thermal laminate.**
- Laminator top and bottom Main rollers set at 185°F to 205°F**
- Speed set at 2 to 4 feet per minute.**

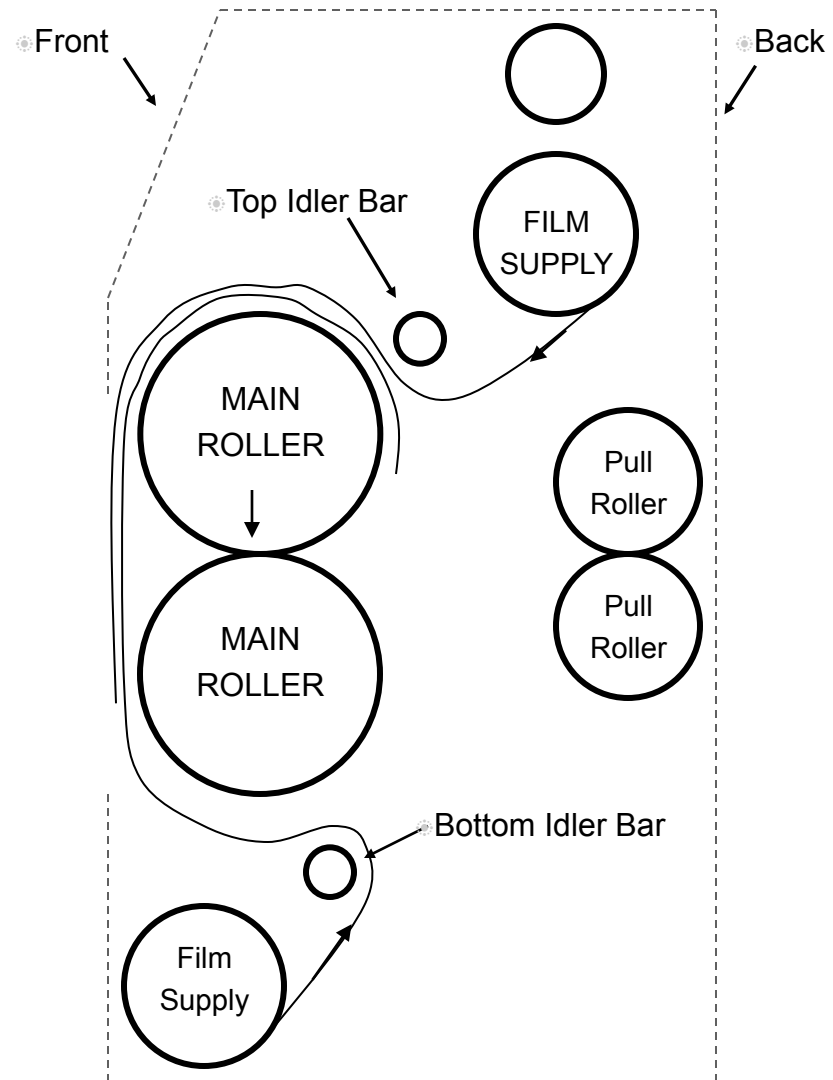
# THERMAL ENCAPSULATION

**Threading the film onto the laminator. Refer to Figure 1.**

**The threading process may be done with the laminator hot or cold. Loading hot will help reduce waste.**

1. First, load a roll of GBC thermal laminating film onto the bottom film supply so that the film comes off the bottom of the roll before going into the laminator.
2. Next, bring the film from the Lower Film Supply up behind the bottom Idler Bar, under the Lower Main Roller and up over the Upper Main Roller as in Figure 1, leaving some excess film to fall over the back of the Upper Main Roller.
3. Next, load a roll of GBC thermal laminating film onto the Upper Film Supply so that the film comes off the bottom of the roll before going into the laminator.
4. Now, bring the film from the Upper Film Supply under the top idler bar and over the Upper Main Roller and film that you previously laid over the Upper Main Roller. Let the film overlap down to the bottom of the Lower Main Roller. Refer to Figure 1.

## Typical Roll Laminator Configuration

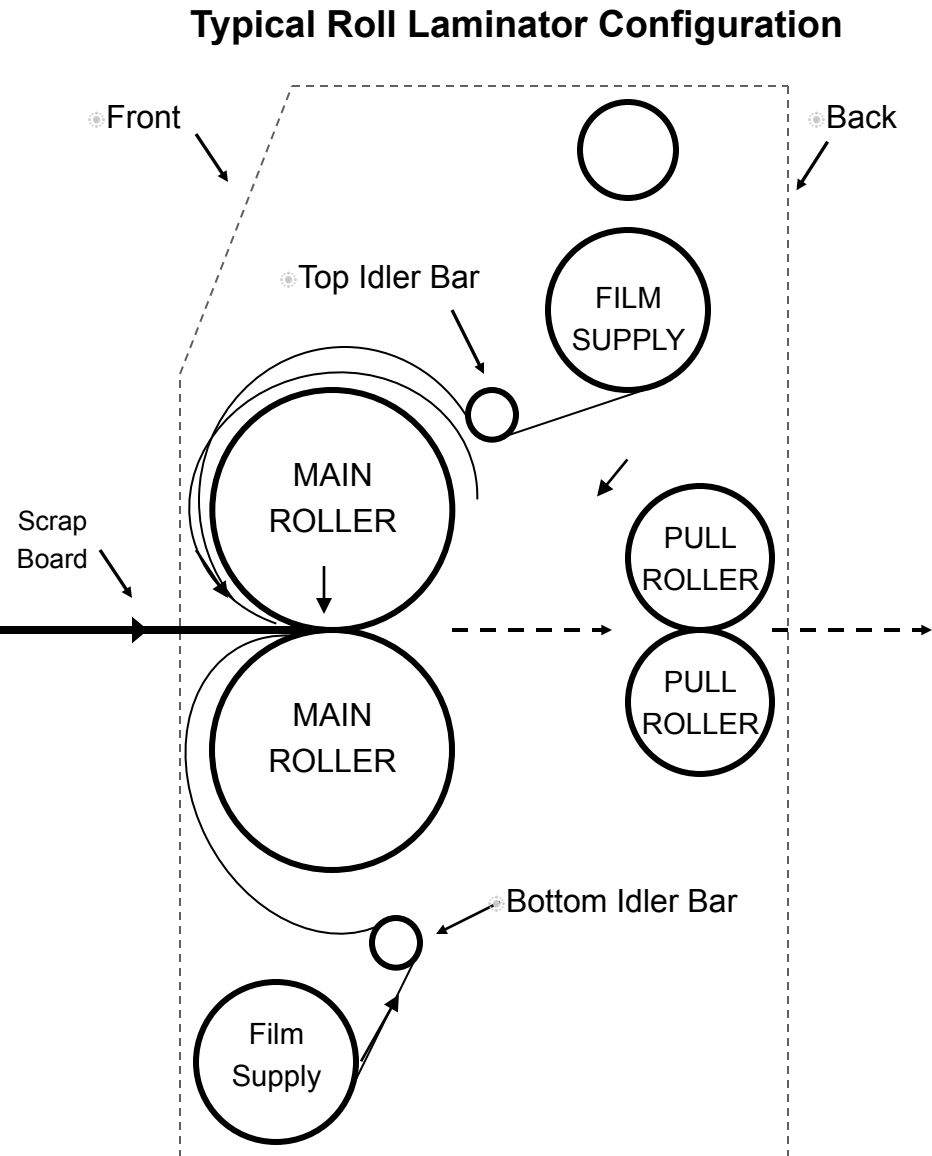


**Figure 1**

# THERMAL ENCAPSULATION

**Bringing the film out the back of the laminator. Refer to Figure 2 this page.**

1. Using a scrap piece of foam board or gator foam board long enough to reach the pull rollers, (be sure the Main and Pull Rollers are gapped for the thickness of board you are using) push the overlapped films into the throat of the top and bottom Main Rollers as shown in figure 2.
2. Ensure that the laminator is on the slowest speed setting and press run or push the foot pedal. The film scrap board and film should start entering the laminator.
3. Allow the scrap board to push the film all the way out through the back pull rollers.
4. If you haven't already heated up the Main Rollers you can do so now to the appropriate temperature.
5. Once the laminator is up to desired temperature you may need to adjust the tension to eliminate wrinkles.
6. You can now encapsulate prints as in Figure 3 next page.



**Figure 2**

# THERMAL ENCAPSULATION

1. Lower the rollers, start the laminator running and insert the print into the laminator.

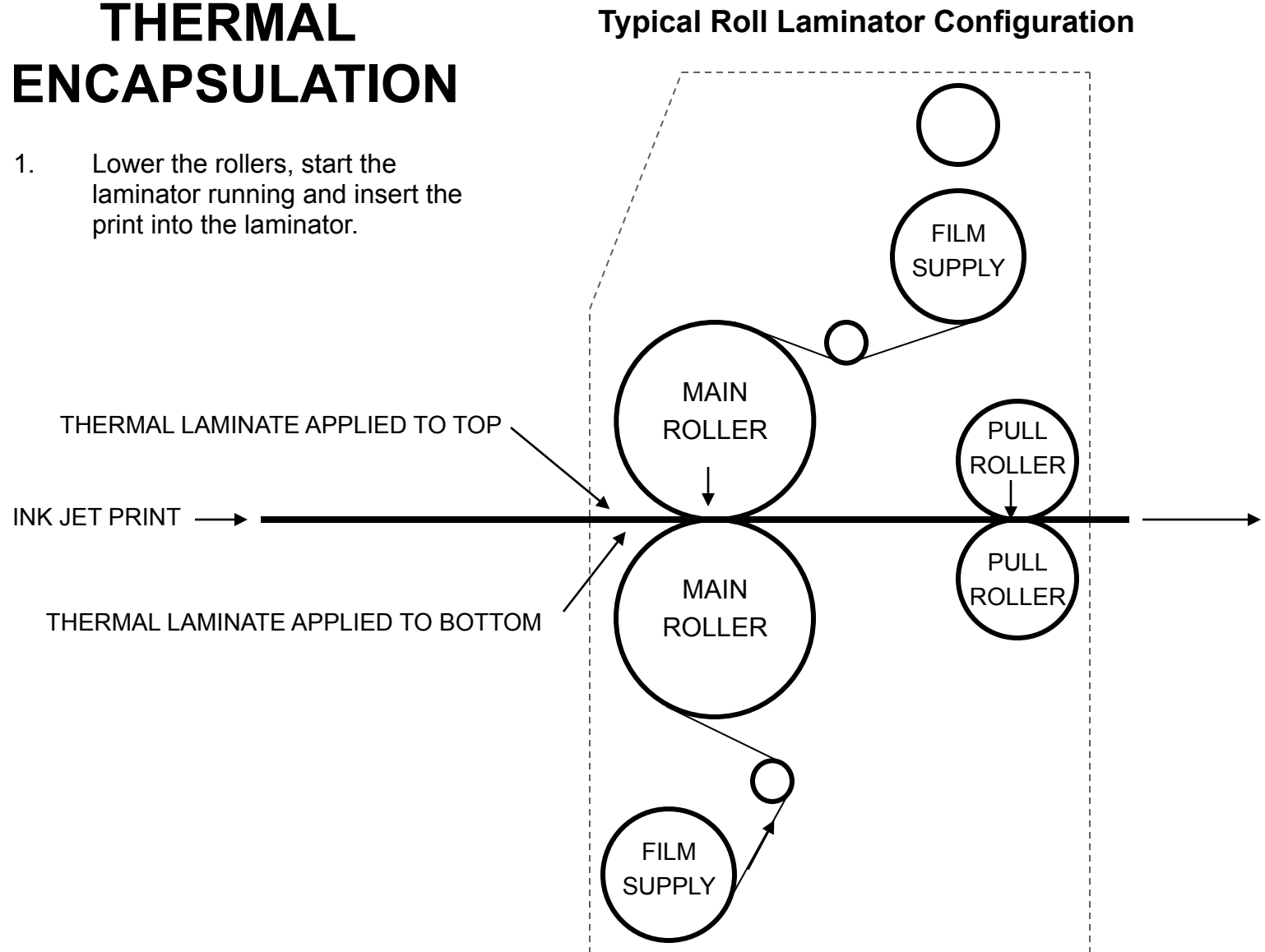


Figure 3 - Encapsulation

# **ONE STEP DECALING WITH GBC THERMAL LAMINATE AND GBC ARCTIC THERMAL MOUNT**

**One Step Decaling with GBC Thermal Laminate and GBC Arctic Thermal Mount will help eliminate lifting on the corners of prints mounted to board and will help reduce bowing of the mounting board for graphics used for long periods of time.**

**This explanation of One Step Decaling is based on the following product and laminator settings.**

- GBC Low Melt UV thermal laminate.**
- GBC Arctic Thermal Mount adhesive.**
- Laminator top and bottom Main Rollers set at 185°F to 205°F**
- Laminator speed set to 2 to 4 feet per minute.**

**Short term decaling (to be used for 3 days or less) can be accomplished with GBC Arctic DuraMount Adhesive instead of Arctic Thermal Mount. Use of Arctic DuraMount on the bottom would require the bottom roller to be left cold.**

# ONE STEP DECALING WITH GBC THERMAL FILM AND GBC ARCTIC THERMAL MOUNT

Refer to threading instructions for Thermal Encapsulation – Figures 1 & 2

Print is passed through the laminator and laminated on both sides as in Thermal Encapsulation

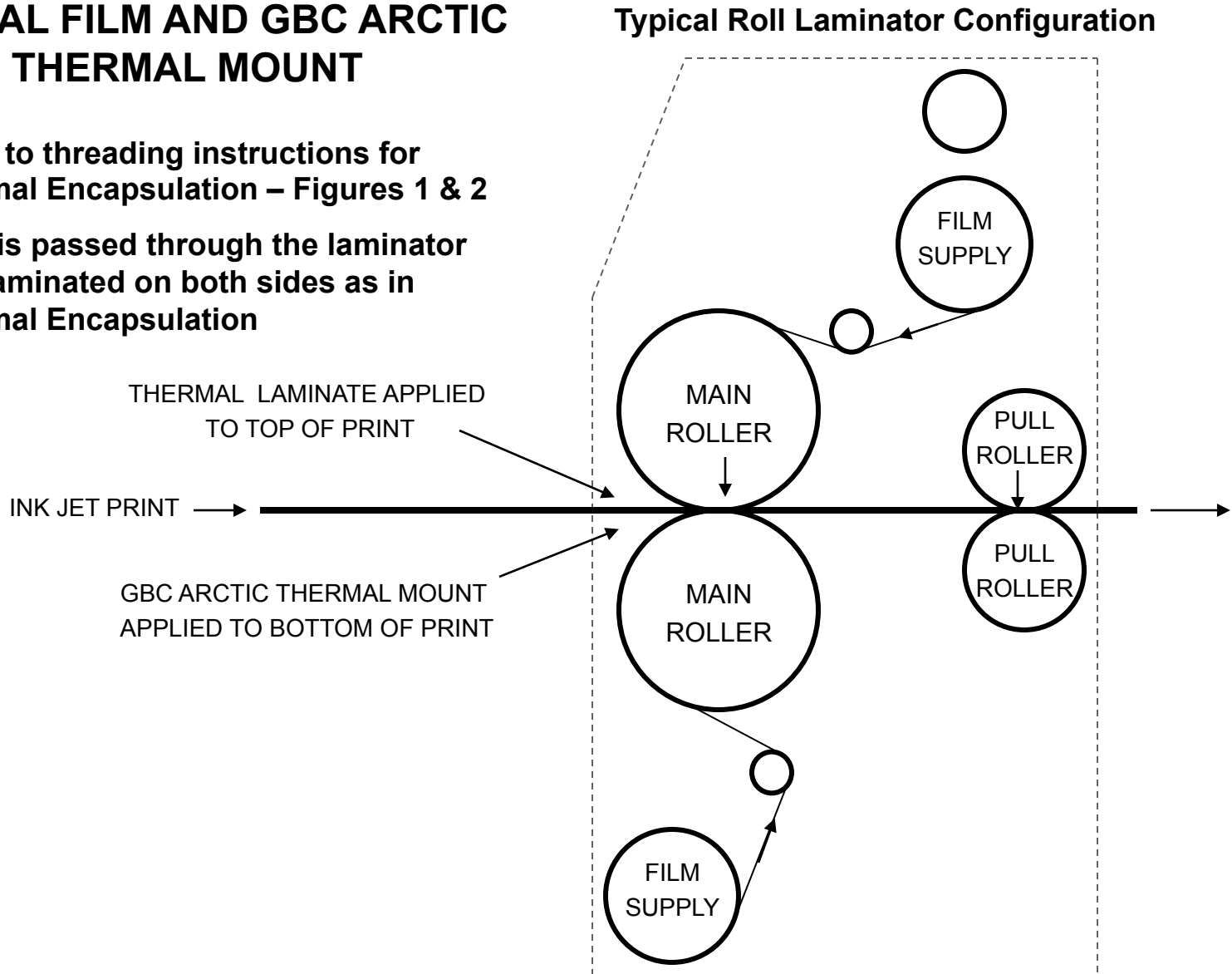
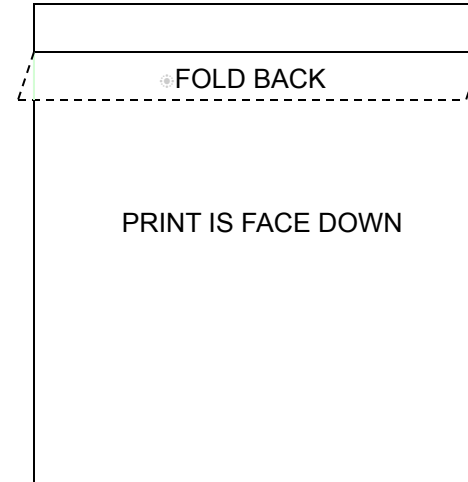


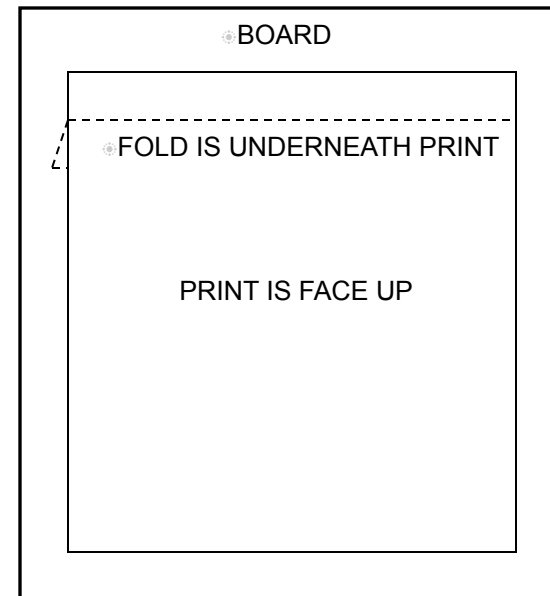
Figure 4 - One Step Decaling

## MOUNTING A DECALED PRINT ONTO BOARD

- 1 After trimming your decaled print on all sides, turn the print face down and fold back about 2 inches of release liner lightly creasing the liner – Fig. 5A.
- 2 Turn the print over on top of the mounting board (mounting board should be larger than print by at least 1 inch all the way around) being careful not to get the exposed adhesive caught on the board.
- 3 Center the print on the mounting board and at the center of leading edge of the print press the print down with both fore fingers and bring your fingers out to the leading corners. (Only press down the very leading edge, not all of the exposed 2 inches of adhesive.) – Fig. 5B



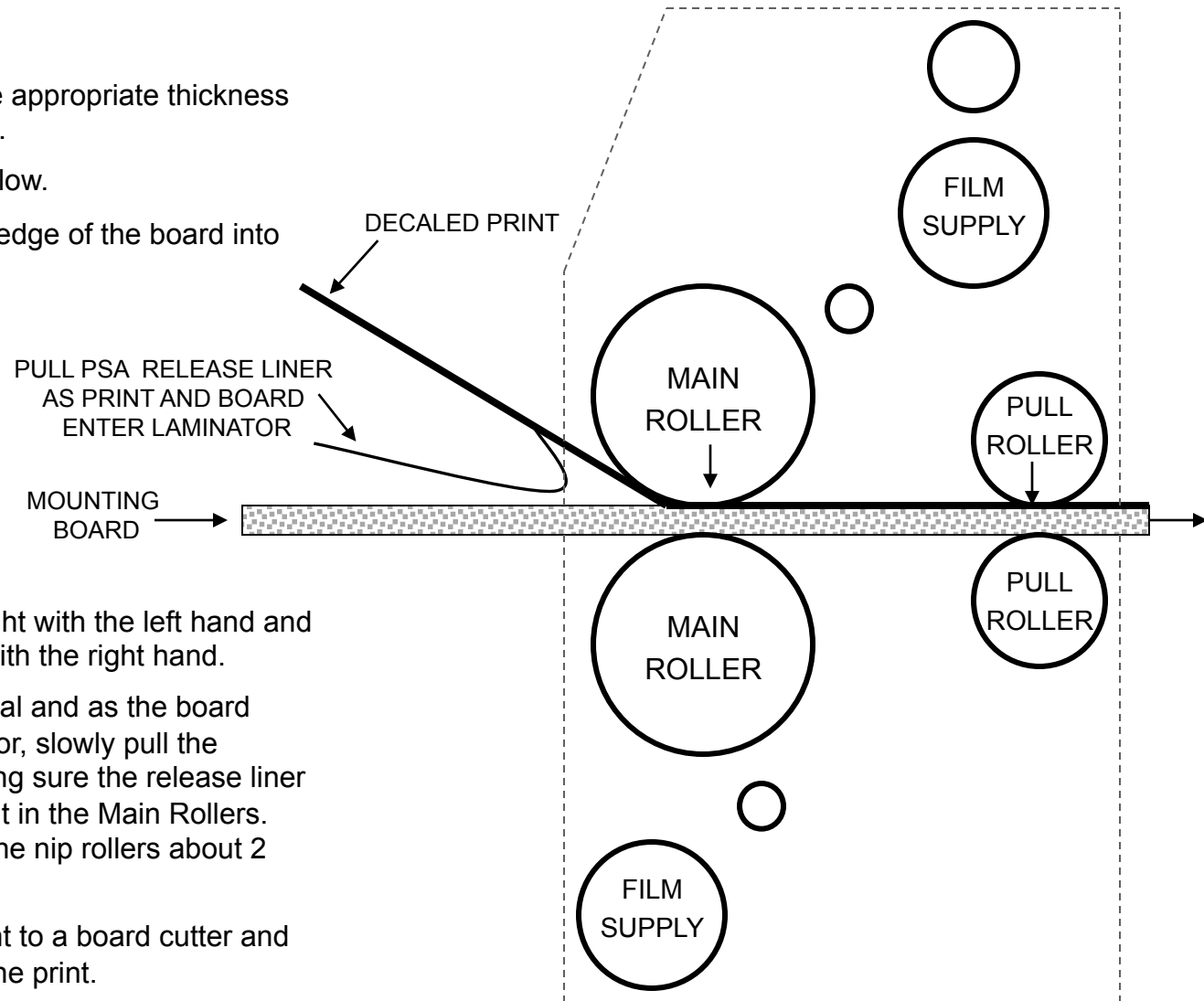
**Figure 5A**



**Figure 5B**

## MOUNTING A DECALED PRINT ONTO BOARD... cont.

- 1 Set the gap for the appropriate thickness of mounting board.
- 2 Set the speed to slow.
- 3 Insert the leading edge of the board into the Main rollers.



- 4 Hold the print taught with the left hand and the release liner with the right hand.
- 5 Press the foot pedal and as the board enters the laminator, slowly pull the release liner making sure the release liner doesn't get caught in the Main Rollers. (Keep back from the nip rollers about 2 inches.)
- 6 Take mounted print to a board cutter and trim the board to the print.

Figure 6 - Mounting Decaled Print to Uncoated Board

# **SINGLE SIDED LAMINATION USING PRESSURE SENSITIVE LAMINATE**

**This explanation of Single Sided Lamination is based on the following product and laminator settings.**

- GBC Arctic Overlamine**
- Laminator top and bottom heated Main Rollers set at 100°F (No more than 120°F) - This is an optional setting. Applying low heat to pressure sensitive films and adhesives reduces the adhesive curing time in half.**
- Laminator speed set to desired speed.**

# THREADING THE LAMINATOR WITH PRESSURE SENSITIVE FILM

1. Load pressure sensitive laminating film as shown in figure 7 bringing excess film down to the center of the bottom Main Roller.
2. Bring the release liner up to the release liner rewind and tape it to the rewind tube only in the center.  
(Different laminator rewinds turn different directions be sure to check)
3. Wind the excess liner onto the rewind tube until taught. Use a scrap board (long enough to reach the pull rollers) to thread the film into the laminator as in the method for Thermal Encapsulation. Insert scrap paper into the laminator after the scrap board to keep adhesive from sticking to the bottom roller unless you are using kraft paper on the bottom roller.
4. Please note it is advisable to thread kraft paper onto the bottom Main Roller if excessive film adhesive will be touching the bottom roller.

Typical Roll Laminator Configuration

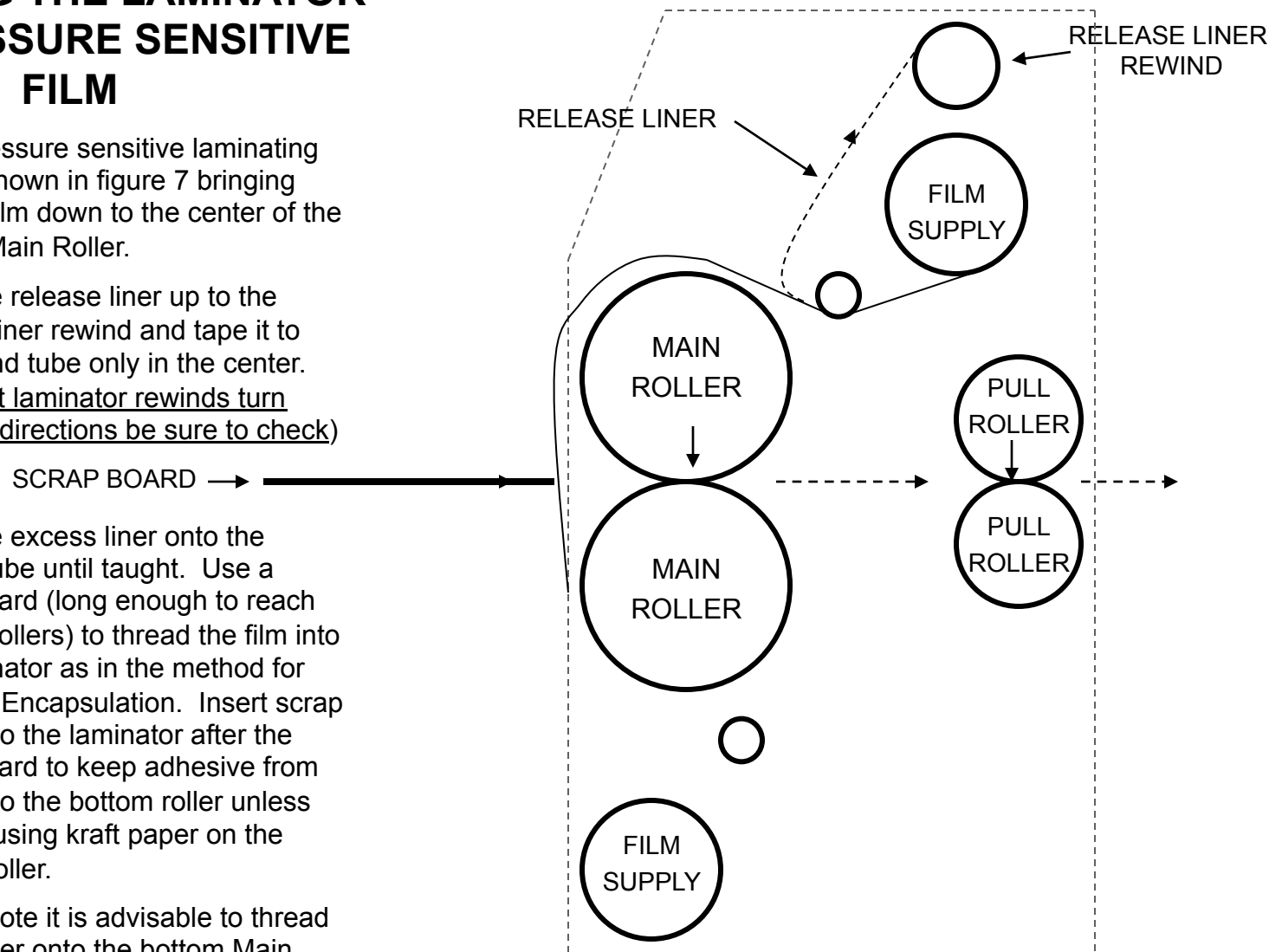
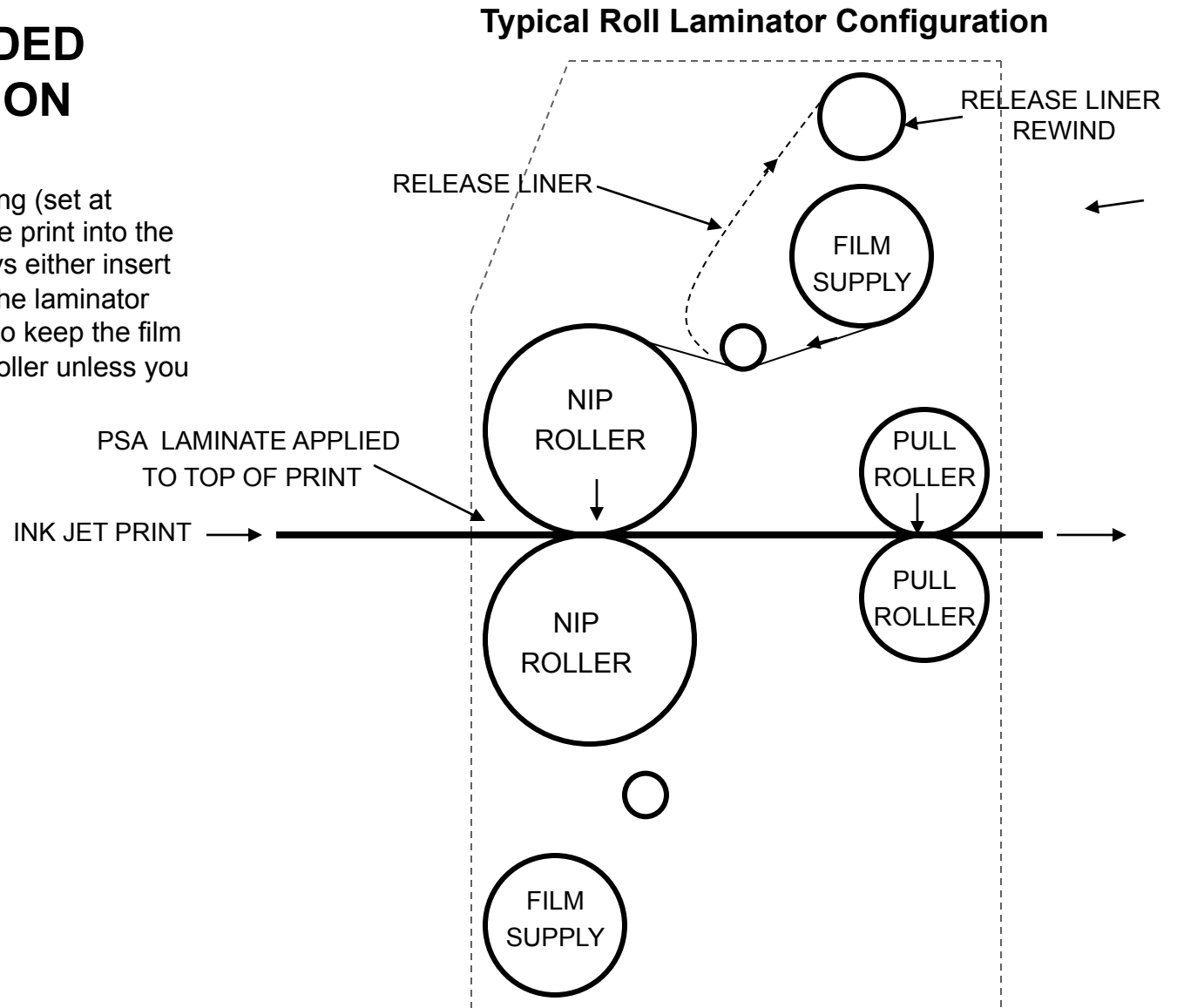


Figure 7 – Threading Pressure Sensitive (PSA) Lamination

# SINGLE SIDED LAMINATION

1. Start the laminator running (set at desired speed) and insert the print into the laminator. You should always either insert a scrap piece of paper into the laminator afterward or gap the rollers to keep the film from sticking to the bottom roller unless you are using kraft paper.



**Figure 8 - Single-Sided Pressure Sensitive (PSA) Lamination**

# **SINGLE SIDED COATING**

## **USING GBC' s NEW AccuShield Liquid Laminating Alternative**

**GBC' s AccuShield has 4 times the UV inhibiting properties of pressure sensitive laminate and is great for outdoor vinyl banners and signs.**

**This explanation of Single Sided Coating is based on the following product and laminator settings.**

- GBC AccuShield**
- Laminator top heated Main Roller set at 260° F - 275° F**
- Laminator bottom Main Roller left cold.**
- Laminator speed set at 2 to 3 ft. per minute.**

**Unlike high temperature laminating film, GBC AccuShield running at 250° F - 275° F should not affect a thermal inkjet print. Again, there are exceptions to every rule so pre-testing with a small sample print is recommended.**

## THREADING THE LAMINATOR WITH ACCUSHIELD

1. If you have dirty Main Rollers or are using a laminator other than a GBC Titan, Talon, Falcon or Orca you will need to thread kraft paper on the bottom portion of the laminator to protect the bottom roller. This example shows threading the AccuShield on a GBC laminator with a separator bar and no kraft paper.
2. With all rollers gapped, thread the AccuShield on the top as in Figure 9 and push the AccuShield into the nip area between The two Main Rollers.
3. Push a scrap piece of paper between the AccuShield and the bottom Main Roller.
4. Lower the Main Rollers together and run the laminator until the paper and AccuShield start to bunch on the separator bar.
5. Thread the paper and AccuShield through the separator bar and out the back.

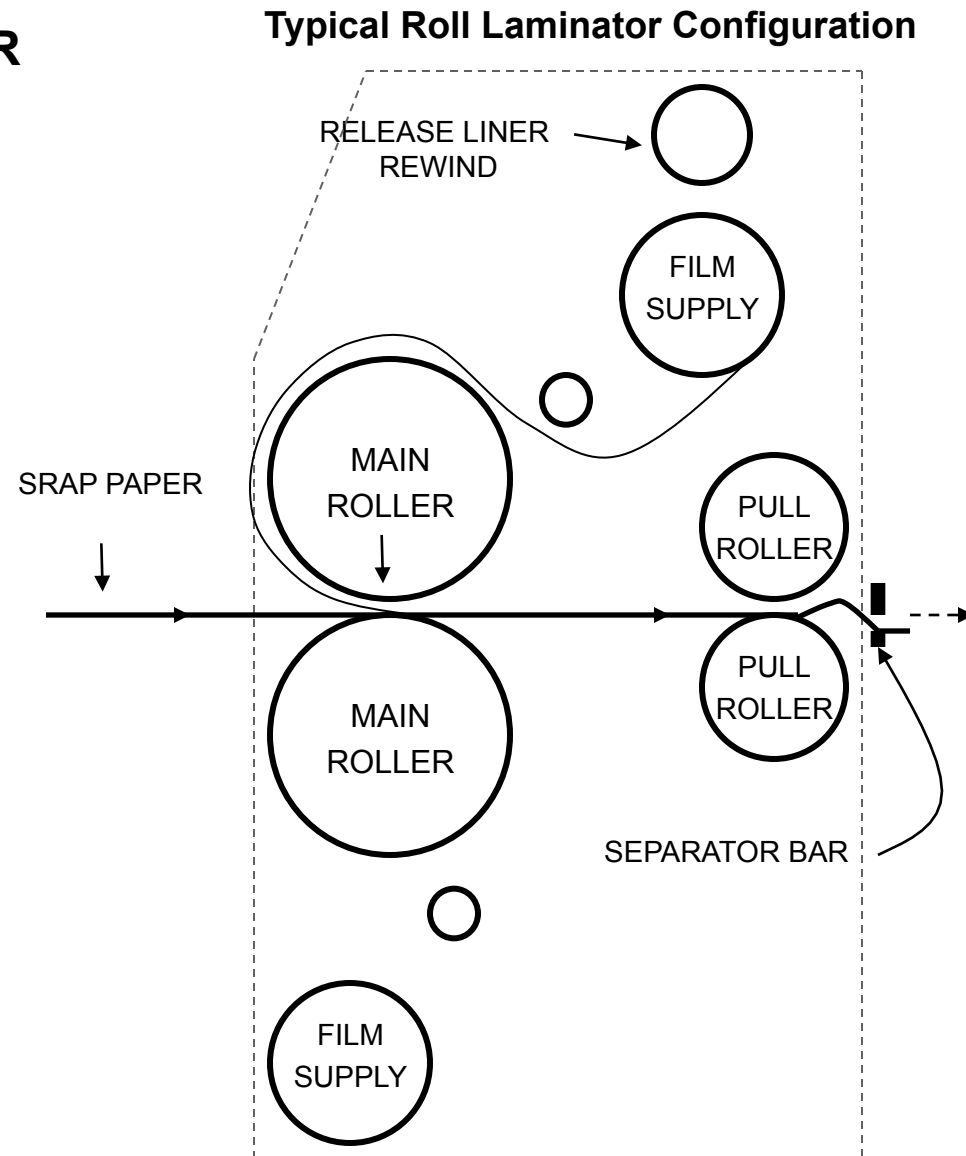


Figure 9 – Threading The Laminator With AccuShield

## THREADING THE LAMINATOR WITH ACCUSHIELD...cont.

6. Run enough excess AccuShield out in order to take the AccuShield up to the release liner rewind. Peel up the AccuShield carrier and take it up to the release liner rewind. Tape it to the center of the rewind and roll up any excess.

## COATING A PRINT

1. Run a print into the laminator. As the print and AccuShield come out the back, they should separate automatically. There is no need to trim. You may need to simply take your fingers along the edge of the print and strip off any dangling flags.

**Note:** If you are not using a GBC laminator with a separator bar you will have to let the print and AccuShield come out the back, trim it off and peel the Accushield carrier off the print by hand. Still no trimming.

### Typical Roll Laminator Configuration

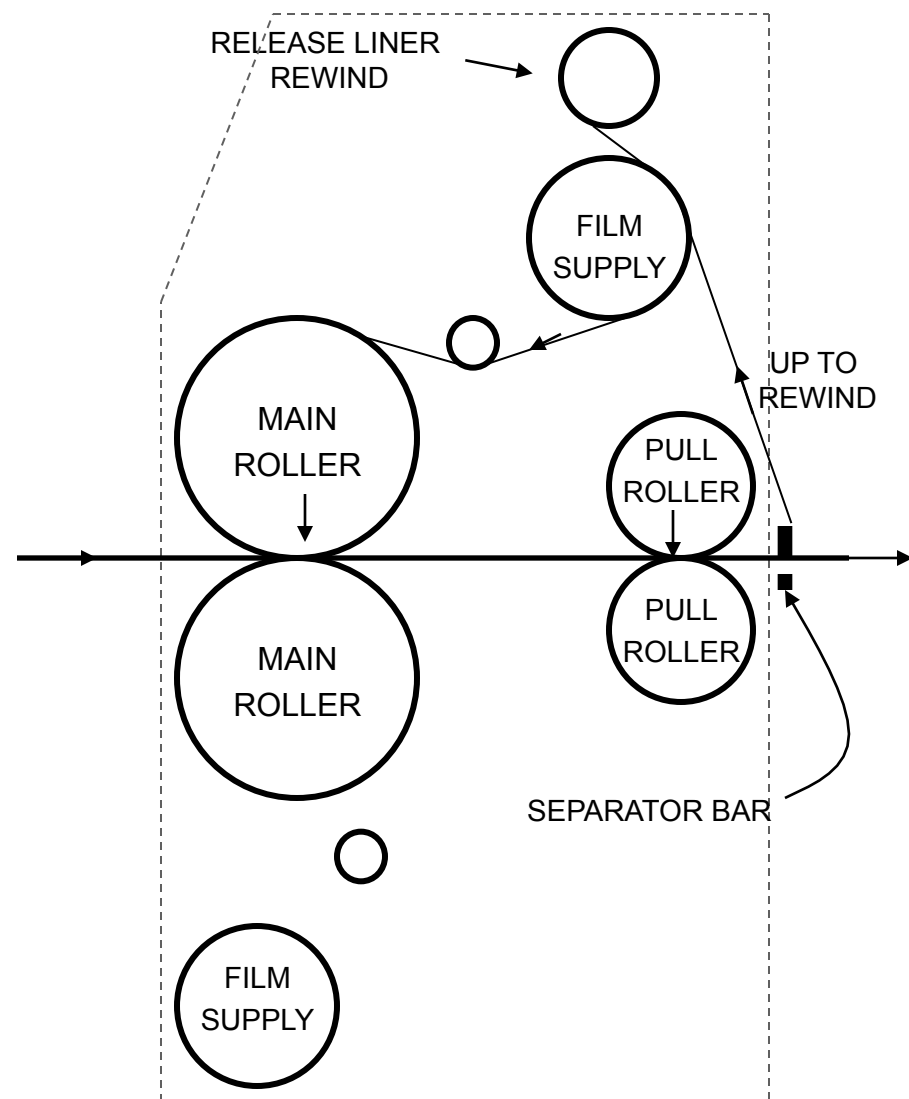


Figure 10 - Single-Sided Coating