Product instruction manual Linea DH-1100

**linea** 

The Linea has been designed to be user friendly, however we strongly recommend you take a few minutes to read through this manual to ensure correct operation.

Keep this manual safe for future reference.

### Warranty & Incorrect Use

#### IMPORTANT INFORMATION

Your Linea Roll Fed Laminator should reach you in perfect condition, however please retain all original packaging once you have unpacked your Laminator as this system is covered by a return to manufacturers warranty. If your Laminator arrives damaged or faulty in anyway this must be reported to your supplier immediately. If you send your Laminator back for repair at any time , then the warranty may be void if the Laminator is not packaged correctly and as a result is damaged in transit. The laminator you have purchased comes with a one year warranty on defective parts and general wear and tear. THIS DOES NOT COVER any film jams, misfeeds or Film wrapped around the rollers caused by operator error and you will be liable for the repair costs (including any delivery charges).

The Laminator rollers are covered against manufacturing defects, they are not covered against any damages caused by misuse ie. being cut with a knife or damage from non Laminating incidences.

E&O.E



## **SAFETY PRECAUTIONS**

| WARNING  |  |  |  |
|--|--|--|--|
| Please do not use broken, aging or self-made electrical wire and damaged supply cord. Please do not immoderately draw, twist or enlace the electrical wire, to avoid the fire or electric shock. |  |  |  |
| $\bigwedge$ Please do not use the power supply that is not in accordance with the rated voltage, to avoid the fire or electric shock.  |  |  |  |
| NO DISJOINT  | <ul> <li>▲ Don't disjoint, modify and repair the machine yourself.</li> <li>▲ If there are any problems on the machine, please do not use it, send it to the dealer for repairing.</li> <li>▲ If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.</li> </ul>  |  |  |
| ENTANGLEMENT<br>CAUTION  | <ul> <li>▲ Keep hands, long hair, loose clothing and articles such as ties or necklaces away from the front of the heating roller and pullroller to avoid entanglement.</li> <li>▲ In case some articles entangled, press the FWD / REV switch to REV right away; if not workable, cut off the power supply at once, and contact your dealer for settlement.</li> </ul>  |  |  |
| ELECTRIC SHOCK<br>CAUTION  | <ul> <li>Do not make the electrical wire or plug or the machine bedewed by wateror other liquids.</li> <li>Do not operate the machine with wet hand.</li> <li>Do not make the machine pressing on the electrical wire.</li> <li>Do cut off the power supply while moving the machine.</li> <li>Do not operate the machine with the cover open.</li> <li>The power socket must be properly grounded.</li> </ul> |  |  |
| HIGH<br>TEMPERATURE<br>CAUTION   | <ul> <li>▲ Do not put articles on the laminator while it is working, so that to disperse the heat.</li> <li>▲ Do not insert the easy-burnt or easy-softened material into the machine, in case they are melt and give rise to smoke.</li> <li>▲ Do not touch the cover, heating roller and heating parts while the machine is working, in case heat injury.</li> </ul>   |  |  |

## **SAFETY PRECAUTIONS**

| <b>CAUTION</b>  |   |  |
|---|---|--|
| WORKING<br>PLACE  | <ul> <li>▲ This machine should be put at the dry and clean place, do not put it at the damp place or near the exit of cooling appliances.</li> <li>▲ This machine should be put on the horizontal and firm place. In front and rear of the machine, there should be sufficient place for the document in and out.</li> <li>▲ Do not put any articles on the machine.</li> </ul>   |  |
| LAMINATING<br>FILM  | Please use good quality laminating film, in order to show the lamination effect, and avoid the entanglement.  |  |
| OBJECT  | <ul> <li>▲ The laminating machine use the hot press technology, do not use the following objects in case laminating failure or laminating film entangle.</li> <li>※ 1.Easy-burnt material, easy-softened material</li> <li>※ 2.The document printed by heat-sensitive paper, or any articles that can be faded or transformed after heating.</li> <li>3.Any articles that have drape, breakage, dampness or deformation before laminating.</li> <li>4.Coin or any other hard articles.</li> <li>※means exception while cold laminating operation.</li> <li>▲ Do not attempt to laminate articles that exceed total recommend material thickness.</li> </ul> |  |
| MACHINE<br>OPERATION  | <ul> <li>▲ Do not turn to other usages except the usage range stated in this operation manual.</li> <li>▲ Do not use the machine outside the room. Before leaving, please cut off the power supply if the operation is over.</li> <li>▲ If there are any problems on the machine, please do not use it, send it to the dealer for repairing.</li> </ul>   |  |
| <b>ADVICES</b>  |   |  |
| ▲ Do not<br>that the<br>▲ Using<br>cause of<br>The ph<br>not be | operating the machine, mind the children nearby, in case any suddenness.<br>t suspend the electrical wire on the table or cabinet or any other places<br>e children can touch, or place easy stumble persons.<br>the accessory that not recommended or sold by the manufacturer, might<br>damage on the machine.<br>noto or document once is laminated, it will become permanent and will<br>taken apart.<br>do not laminate the collected rare articles, or some articles might be   |  |

 $\triangle$  Please do not laminate the collected rare articles, or some articles might be taken out in the future.

#### STRUCTURE AND CONTROL PANEL Top supply roll tension knob Safety shield Core adapter Take-up bobbin Top roll shaft Take-up bobbin tension knob Active bolt Top stabilizer bar **Emergency stop Roller** pressure Left side cover knob Bottom supply roll tension knob Bottom stabilizer bar **Control panel** linea **Right side cover** Feed guide-Heating roller Bottom roll shaft Feed table Stand **Base plate (optional)** LCD Load button SPEED TEMP LOAD Speed control knob Temp. control knob нот FWD RUN **RUN / STOP switch** FWD / REV switch HOT / COLD switch REV STOP COLD

## **INSTALLATION**

1.Upon receipt of the laminator, inspect of box, the machine and all other contents of the box for shipping damage. Shipping damage should be brought to the immediate attention of the delivering carrier.

2. The laminator comes fully assembled on a stand .

3.Screw the wheel on the stand, put the stand upright. Place the tie bar horizontally, connect the bar and stand with the bolt which has spring washer on it, then fasten it.

4.Put the laminator on the assembled stand.

5.Start operation after turning the wheel stop switch to "OFF".

## FUNCTIONS OF LCD DISPLAY AND CONTROL PANEL

#### 1. LCD display and Function

Protecting function of temp sensor's open circuit and shot circuit



When the sensor is in open circuit, **OPN FAULT** displays on the LCD.

When the sensor is in short circuit, **CLS FAULT** displays on the LCD.

Note: No matter what problems happened, the machine will cut off the heating power supply automatically, and the motor will stop running.

- 2. Function of control panel
  - 1) Temperature control knob

## FUNCTIONS OF LCD DISPLAY AND CONTROL PANEL

- A)Turn the temperature control knob can increase or decrease the set temperature. The set temperature will display on the LCD.
- B)The range of temperature that can be adjusted manually is  $0^{\circ}C-140^{\circ}C$ .
- C)The true temperature of the roller will display on the LCD.
- D) When the true temperature reach  $140\,{}^\circ\!\mathrm{C}$  , the over-heat protecting system will run automatically.

#### 2) Speed control knob

- A)Turn the speed control knob can increase or decrease the laminating speed. The set laminating speed will display on the LCD.
- B)The max. laminating speed is 1.4 m/min.
- 3) FWD / REV switch

Press FWD / REV switch can change the working direction of the motor. A)While set the FWD / REV switch to FWD, the motor runs forward,

Will display on the LCD. The laminating film in, the machine works. B)While set the FWD / REV switch to REV, the motor runs reverse,

- B) while set the FWD / REV switch to REV, the motor runs reverse, REVERSE will display on the LCD. The laminating film out. This function is used for remove the object inserted by mistake.
- 4) HOT / COLD switch

Press HOT / COLD switch can change the function of machine between hot and cold lamination.

- A)While set the HOT / COLD switch to HOT, the machine is on hot laminating, the set temperature will display on the LCD.
- B)While set the HOT / COLD switch to COLD, the machine is on cold laminating, COLD will display on the LCD.

#### 5) RUN / STOP switch

 $\ensuremath{\mathsf{Press}}$  RUN / STOP switch can change the working condition of the motor.

A)While set the RUN / STOP switch to RUN, the motor of the machine works.

B)While set the RUN / STOP switch to STOP, the motor of the machine stops, STOP will display on the LCD.

#### 6) LOAD button

When the safety shield or feeding table are taken out, the machine will not run. Set the speed at minimum speed, press the LOAD button continuously, the machine can run at minimum speed, you can either load the film or clean the roller.

### 3. Emergency Stop



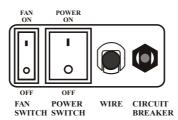
There is a emergency stop button on the front of the laminator. In emergency situation pressing the button will stop the rollers and stop heating. Rotate the button to the direction of arrow to turn on the power supply.

## **OPERATION INSTRUCTIONS**

## PREPARATION

#### 1. Connecting the power source

1) Checking the rated voltage on the machine, to insure it conform to the power source. Also, checking the plug to insure it conform to the socket.



- 2) Insert the plug into the power socket that is grounding correct.
- 3) Turn on the power switch, the LCD light, it indicates the power is connected.

#### 2. Motor overload circuit breaker

This machine is equipped with motor overload circuit breaker (it is located next to the power switch), in order to protect the motor working normally. When the motor is overload, the circuit breaker will jump and cut off the motor power. One minute later, when the overload is clear, press the circuit breaker button, the motor will start again.

#### 3.Film threading HOT FILM

Step 1: Raising the safety shield.

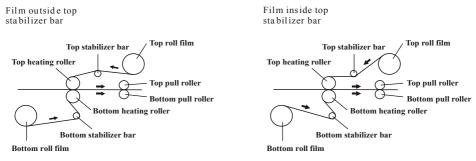
Remove the active bolt on the shield, raise the safety shield.

Step 2: Taking out the feed table.

Remove the active bolt under the feed table, take out the feed table.

Remark: the machine will power off when the safety shield and the feed table are not in their proper positions.

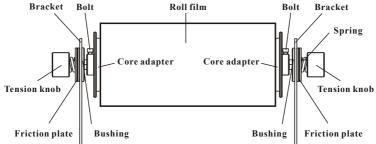
#### Step 3: Follow the diagram to thread the film



Film Threading Diagram

Remark: Usually the shiny side is the polyester side, it contact the roller. The dull side is coated with adhesive. For the matte film, the two sides have minor difference, please especially be careful. Heat the film with lighter can easily tell the polyester side and adhesive side. The adhesive side must face away against to the roller.

Slide the roll film onto the roll shaft (follow the above instruction, do not load the film in wrong side). Hold the roll film on the core adapter, the core adapter can hold the core of the roll film, to prevent it rotating. Screwing the bolt on the core adapter. Put the rolls on the brackets. Make sure it is fully seated.



**CAUTION:** For hot laminating, the top and bottom roll film must have same width, besides, the top film and bottom film must be aligned. (If the film is not in alignment, loose the bolt on core adapter and align it.)

Step 4: With both roll films threaded and installed in their respective brackets, unwind the top and bottom supply rolls about half-turn each. This will provide enough slack in the web to allow the feed table to slide on easily.

Step 5: Slide the feed table into position and lock the active bolt.

Step 6: Position the safety shield forward toward the roller and lock the active bolt.

**Remark:** The machine will not power on without the feed table and the safety shield in the proper positions.

Step 7: Make sure there is still enough slack in the web. Close the rollers with the knob on the right side of the laminator. With the film draped over the two heating rollers, and melted or taped together, push one edge of the threading card between the heating rollers so that the film is firmly positioned. Make sure the rollers are in closed position. If a threading card is not available, any piece of card stock or poster board will work.

Step 8: Set the FWD / REV switch to FWD and set the RUN / STOP switch to RUN. If the film and the card are in the nip (the point where the top and bottom roller meet), the film and the threading card will start into the laminator and will pass through both sets of rubber rollers. When the threading card has cleared the back of the machine, set the RUN / STOP switch to STOP.

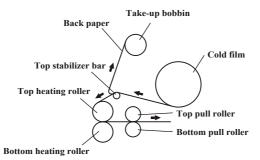
**CAUTION:** For operator safety, the safety shield must be in position over the upper heating roller when the machine is ON.

#### COLD FILM

Step 1: Raising the safety shield.

Remove the active bolt on the shield, raise the safety shield.

Step 2: Follow the diagram to thread the film



Slide the roll film onto the roll shaft (follow the above instruction, do not load the film in wrong side). Hold the roll film on the core adapter, the core adapter can hold the core of the roll film, to prevent it rotating. Screwing the bolt on the core adapter. Put the rolls on the brackets. Make sure it is fully seated.

Step 3: Insert a piece of wide cardboard (guiding paper) between the rollers. the width of cardboard should be larger than the width of cold film. Pull the film from the top roller passing over the top stabilizer bar to the top roller.

Step 4: Put the paper back of the cold film to the bobbin at take-up bar to rewind the paper back. Allow some of the cold film with melted resin to stick the wide cardboard (guiding paper).

Step 5: Position the safety shield forward toward the roller and lock the active bolt.

Step 6: Close the rollers with the knob on the right side of the laminator. Set the FWD / REV switch to FWD and set the RUN / STOP switch to RUN. The films will be fed into the machine. Check the status of lamination.

Remark: The machine will not power on without the safety shield in the proper positions.

## HOT LAMINATING

1.Turn on the machine, set the RUN / STOP switch to STOP, set the HOT / COLD switch to HOT. The machine begin heating. Turn the temperature knob to the temperature for whatever film is being used.

2. The laminator will be ready to operation in about 10 minutes.

1) Trial lamination

If the roll film is the first time to be used, the trial lamination is required for perfect result. After the true temperature of the roller reach to the set temperature, close the rollers with the knob on the right side of the laminator, set the FWD / REV switch to FWD and set the RUN / STOP switch to RUN, let at least 250mm of film go through the rollers before inserting the items to be laminated. Examine the film coming out the back of machine.

Adjust the machine according to the above instructions until you have the perfect lamination result.

2) After the trial lamination has a satisfied result, position the feed guides according to the width of the item to be laminated, entering the item in the web of film.

# Remind: keep clear and enough space behind the machine, so that the laminated item can come out easily, it will not wind onto the rubber roller. If the machine is stopped for a long period, set the temperature decreased by $5-10^{\circ}$ C, this will prolong the work-life of the machine.

Stop the machine after the item to be laminated pass through the roller completely, otherwise there will be an imprint on the item.

## MAINTENANCE AND SERVICE

#### **Temperature setting**

Normally, your film supplier should provide the information about the film application temperatures and operating characteristics. If you do not know the source of your film, or if the supplier cannot provide the information, please try the temperature and speed until you have the best result.

## **COLD LAMINATING**

1.Set the HOT / COLD switch to COLD.

2.Set the speed to the required speed.

3.Put the document on the feed table.

4.Set the FWD / REV switch to FWD and set the RUN / STOP switch to RUN. 5.Stop the machine after the document to be laminated pass through the roller completely, otherwise there will be an imprint on the document.

CAUTION: The adhesive side must face away from the roller.

## **GENERAL MAINTENANCE**

Do not laminate the metal or other hard items in case the damage of the rubber rollers.

While stop the laminating, lift the top rubber roller with the knob on the right side of the machine. Do not press the rubber roller in case the rubber become stiff and thus shorten its work-life.

Cleaning the machine timely will help prevent dirt or adhesive build-up on the rubber rollers and will improve the performance of the unit.

## **CLEANING THE RUBBER ROLLERS**

During the normal lamination, excess adhesives from the film will often cling to the rubber rollers.

To clean the rubber rollers, lift the rubber roller, remove the film from the machine first, heat up the machine to  $30-40^{\circ}$ C. The warm roller enable it easier to remove the adhesive built-up on the rollers. Raise the safety shield and take out the feed table. Using a clean, soft, ethanol dampened cloth, gently rub the adhesive off the rollers.

**CAUTION:** Never use any abrasive or sharp metal material or rub too hard on the roller, because you may damage the rubber surface.

## MAINTENANCE AND SERVICE

Set the speed at minimum speed, press the LOAD button, the roller will run, cleans the roller. After cleaning, position the feed table and slide on the safety shield.

**CAUTION:** If the film gets wrapped around the roller, set the RUN/STOP switch to STOP immediately, set the HOT / COLD switch to COLD.

**WARNING:** Do not use any cleaning solution to clean the roller, because some solutions may burn on the hot roller. After the roller cool down, cut the film on the top and bottom, just in front of the stabilizer bars. Reverse the roller at a very low speed and allow the machine to back out the film that is wrapped around the rolls, pull the film off the roller. Clean the adhesive on the roller.

## **PROBLEM SOLUTION**

#### Please read this section before you have a problem

**PROBLEM:** No power is getting to the machine.

**SOLUTION:** Make sure there is power at the electrical outlet being used, and make sure both ends of the power cord are firmly engaged.

The laminator equipped with three fuses (one is located next to the power switch, the other two are located under the bottom of laminator). Please check these fuses.

**PROBLEM:** Wrinkling of the film around the material being laminated.

**SOLUTION:** This is normal and inevitable on any laminator, especially with thicker material. These wrinkles will be trimmed away with the scrap, so they do not affect appearance. Because the rollers are being held apart by the paper, they cannot pull equally on the plastic around the paper. This creates wrinkles that tend to look like the bow waves of a boat, radiating out through the clear part of the web from the sheet of material.

**PROBLEM:** When two pieces of material are laminated side by side, the plastic adhesive to one piece but not the other.

**SOLUTION:** To get maximum efficiency from the film rolls, you can feed several items into the laminator side by side. However, wrinkling can occur if these items are of unequal thickness, because the laminating rollers are lifted off the thinner items by the thicker items. When laminating items side by side, it is important to arrange them so that the thickness is the same.

## MAINTENANCE AND SERVICE

**PROBLEM**: Film gets wrapped around the laminating rollers while hot laminating.

**SOLUTION:** The film is threaded improperly. If the adhesive side face to the roller, the film will be wrapped around the rollers. Thread the film in proper position.

The laminating temperature is too high, the film will be melted and wrapped around the roller. Decrease the laminating temperature.

Set the RUN / STOP switch to STOP immediately, set the HOT / COLD switch to COLD. After the roller cool down, cut the film on the top and bottom, just in front of the stabilizer bars Reverse the roller at a very low speed and allow the machine to back out the film that is wrapped around the rolls, pull the film off the roller.**PROBLEM:** Wrinkling of the plastic on a laminated material.

**SOLUTION:** Check the tension of the film, make sure the film is threaded properly (see film threading).

**PROBLEM:** Film is not properly adhered.

**SOLUTION:** The laminating temperature is too low, there is not enough heat for melting the adhesive. Increase the laminating temperature.

**PROBLEM:** The laminated material seems to have a irregular surface that does not match the texture of the paper being coated.

**SOLUTION:** This is usually caused by adhesive build-up or dirt on the rubber rollers. Inspect the rubber rollers and clean it.

Damages to the rubbers can also cause irregularities in the surface of the film.

**PROBLEM:** General haziness or cloudiness in the film after lamination.

**SOLUTION:** Increase the temperature or decrease the speed. That cloudiness is a function of incomplete adhesion. On a variable speed machine loaded with thicker film, it may be that the film is being run too fast.

#### SERVICE

If the service is required, please provide the following information:

- The detail of the problem
- Tinstallation Date
- 🖝 Serial number

## **SPECIFICATION**

| Model                       | 1100                       |
|-----------------------------|----------------------------|
| Operate mode                | Electric                   |
| Max. laminating width       | 1050 mm                    |
| Max. laminating thickness   | 5 mm                       |
| Max. laminating temperature | 140°C                      |
| Max. Laminating speed       | 1.8M/min                   |
| Recommended film            | Up to 250 mic              |
| Temperature control         | 8-bit microprocessor       |
| Heating method              | Heating roll               |
| Power supply                | AC100,110,220-240V/50,60Hz |
| Power consumption           | 2700W                      |
| Dimensions (L x W x H)      | 1350×600×1170 mm           |
| Weight                      | 155 kg                     |