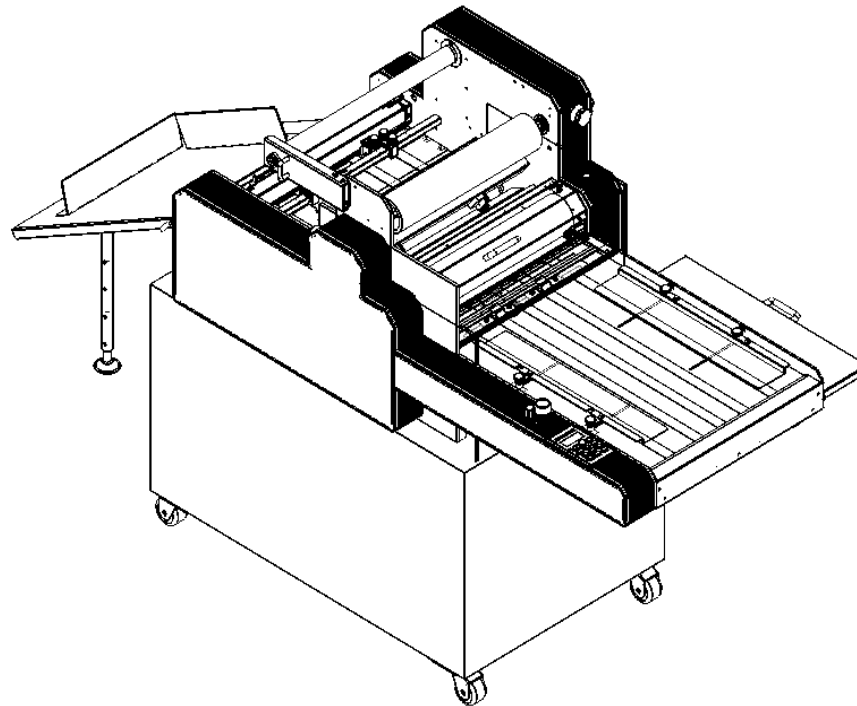
 **PROTOPIC II -540**
PROTOPIC II -540 FUSER
PROTOPIC II -540 DUAL
PROTOPIC II -540 DUPLEX User Guide



"Important Safety Instruction" is for the purpose of user's safety and prevention of Property loss. Read thoroughly and Use rightly according to the manual

※ Outer design and Product specification can be changed without previous notice

● Safety

Caution for safety	page
Safety device	page
Safety Sticker	page

● Installation

Contents	page
Main Device	page
Product Movement & Installation	page

● Control Panel

Component of Control Panel	page
Display window	page
Button Function	page
Functional Control Panel	page
Message	page

● How to use Main Device

Usage of Laminating Part
Perforating Part
Film loading and Exchange
Other Device

● How to use Main Device (DUAL)

● How to Laminate

● Summary

● Sleeking Method & Application

- 1) Gloss/Matt Sleeking
- 2) Hologram Sleeking
- 3) Metallize Sleeking

● Trouble shooting

● Error Treatment

● Product Specification


● Film Specification

Important Safety Instruction


"Important Safety Instruction " is for the purpose of user's safety

and prevention of Property loss. Read thoroughly and Use rightly according to the manual


 **Warning :** If you ignore this symbol, you could suffer serious injury or death

 **Caution:** If you ignore this symbol, you could receive a serious injury or loss of property

 This symbol means a prohibited action. If you ignore a prohibited action, you could suffer a personal injury and damage the machine

 This symbol means a required action. If you don't follow this action, your safety is not guaranteed.

Required action will be included in this symbol.

 **Reference:**The sign above refers the contents for user's safety and prevention of Property loss.

Power



Do not connect or disconnect with wet hands, as this will cause an electric shock



Do not overload a power supply, as this will cause a fire and an electric shock.



Do not use a damaged plug or lead, as this could cause a fire or an electric shock



Do not use other voltage and power supply other than specified, as this will cause a fire and an electric shock.



Make sure plug is in the socket, as it could cause fire or an electric shock



Danger, Malfunction, loss of electricity could cause an electric shock



Do not pull the plug or bend improperly

Installation



Do not use materials near a naked flame



Do not use the machine in the sealed place.



Only use the specified power and voltage. It can be a reason of fireflame or an electricity fireflame.



Do not disassemble, make repairs or convert the machine. Contact your dealer for repairs



Ensure all hair, neckties, necklaces, are kept free of the feeding table to avoid injury



Do not convert the safety device and safety switch.



Do not spill any liquids on the laminator as this will cause damage and a possible electric shock



Do not use the flammable spray or flammable materials inside or outside the machine. As this could cause a fire.



Do not allow children use of this equipment

Important Safety Instruction

WARNING

Power



When moving the product, turn off the power switch, disconnect the power plug from the socket



When lamintor is not in use, you must turn off the power switch, disconnect the power plug from the socket.

Installation



Danger - laminating blades are sharp and can cause injury.



More than 2 people are needed to carry this equipment to avoid personal injury or damage to the machine.



Keep gears and chains free of all materials



Do not touch the roller with your hand as you could be burnt.



Please avoid installing near the following places;






Gas stove, Ventilator or Air conditioner due the higher temperature or higher humidity

Do not place any materials on the laminator as they could catch a fire

Avoid the direct sunlight for the installing the machine

Make sure no vibration and dusts are found in the place during the installation.

Important Safety Instruction

-  Avoid the dark and slope place for installation
-  Do not place any materials on the laminator as they could catch a fire
-  Do not touch the film and laminating machine just after lamination finishes as you could be burnt.
-  Use the machine with laminating purpose only.
-  Tidy up the place near the laminating machine.

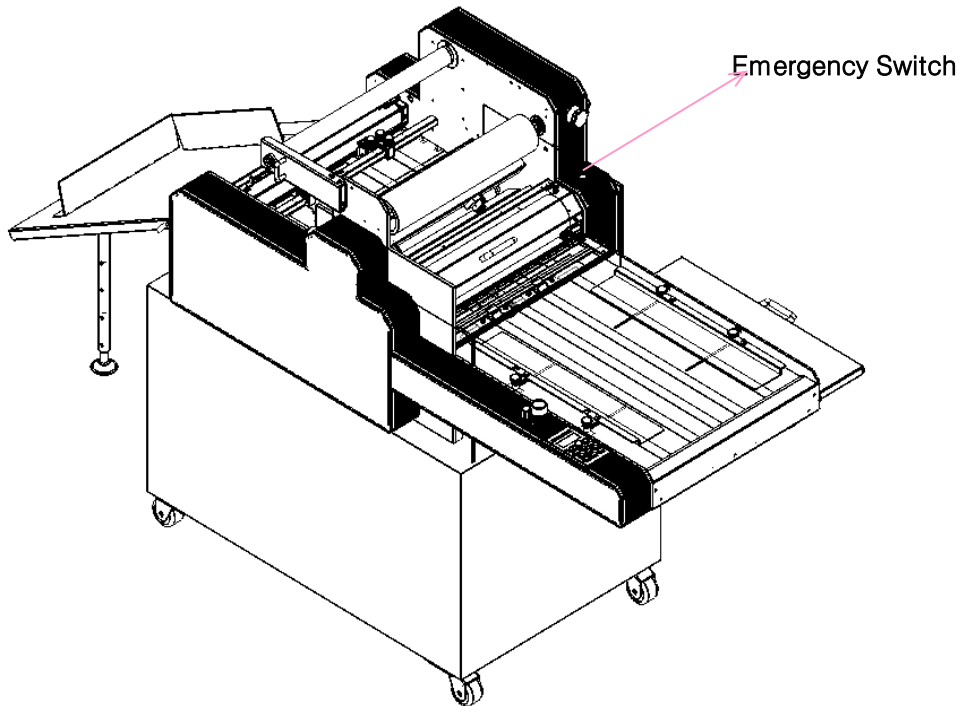
Emergency Switch

Emergency Switch

When emergency situation happened, it stops the running motor(rollers) rotation and system operation.

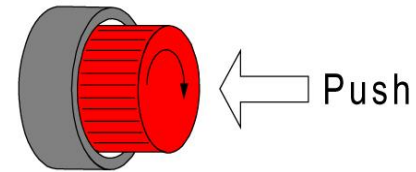
In case of emergency, use this switch.

Emergency Switch Position

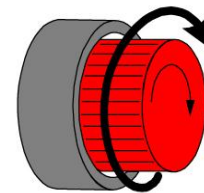


Emergency Switch and Unlocking

If you press the below red knob , it works
all system stops



If you turn right the below red knob as shown below , it works
Emergency switch function returns.



Safety Sticker

For the user safety, in the outer design, the below sticker is attached. Be cautious not to injured during operation.



Roller caution

Do not touch the roller and heating plate with your hand as you could be burnt.
Roller's higher temperature and press can damage your body



Higher Temperature

Do not touch on the heating part



Cutting Caution

Do not touch your body on the trimming device
You can suffer an injury



Electricity Caution

Inside the machine, high voltage flows,
Do not open the outer case
You can suffer injury or sudden death with electricity shock



Chain Caution

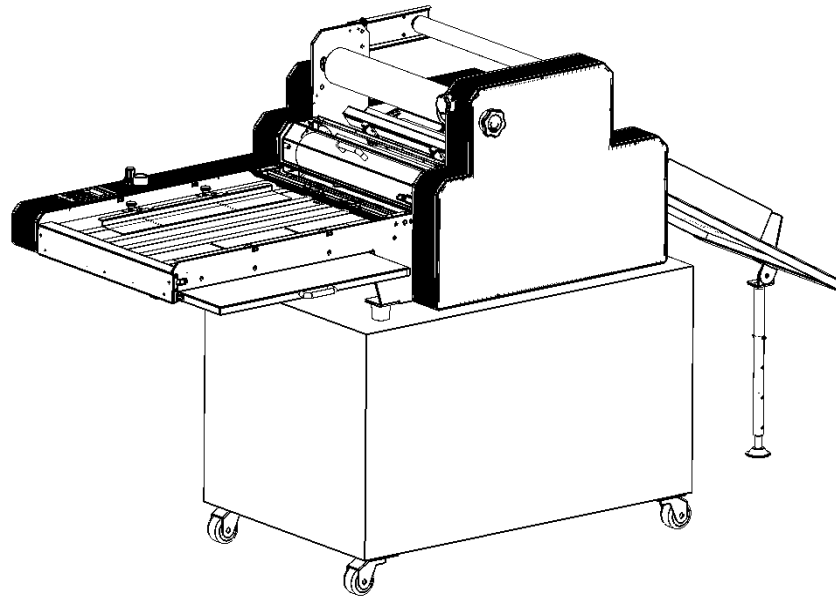
Do not your body wound into a chain.시오.
You can suffer an injury



Packing Contents

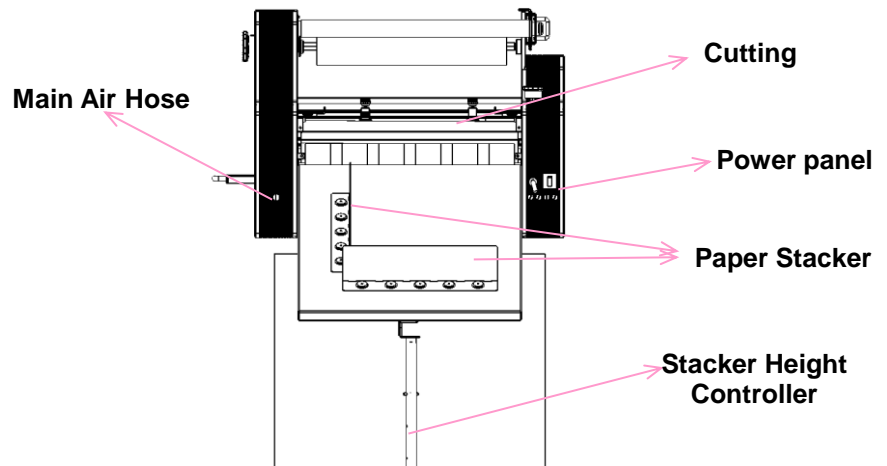
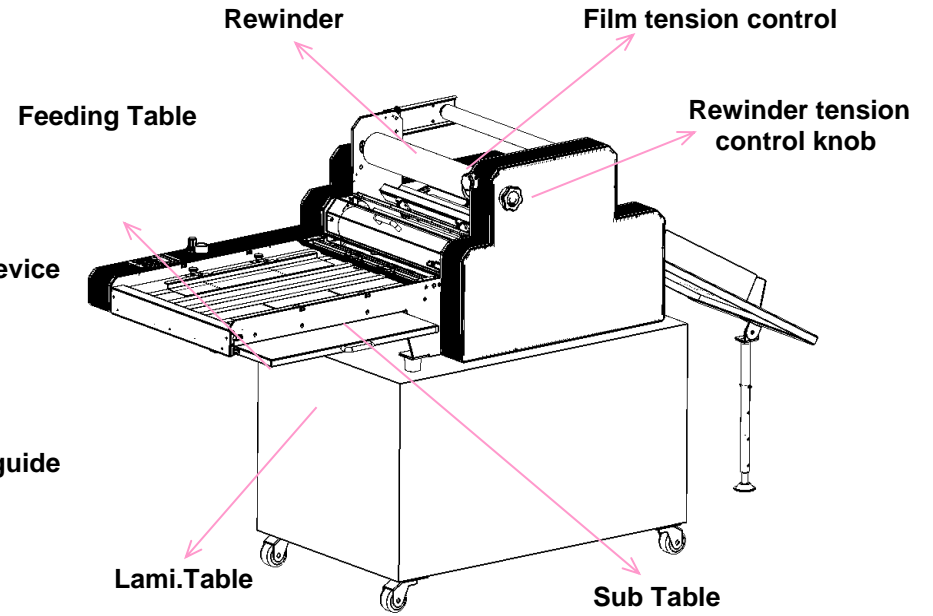
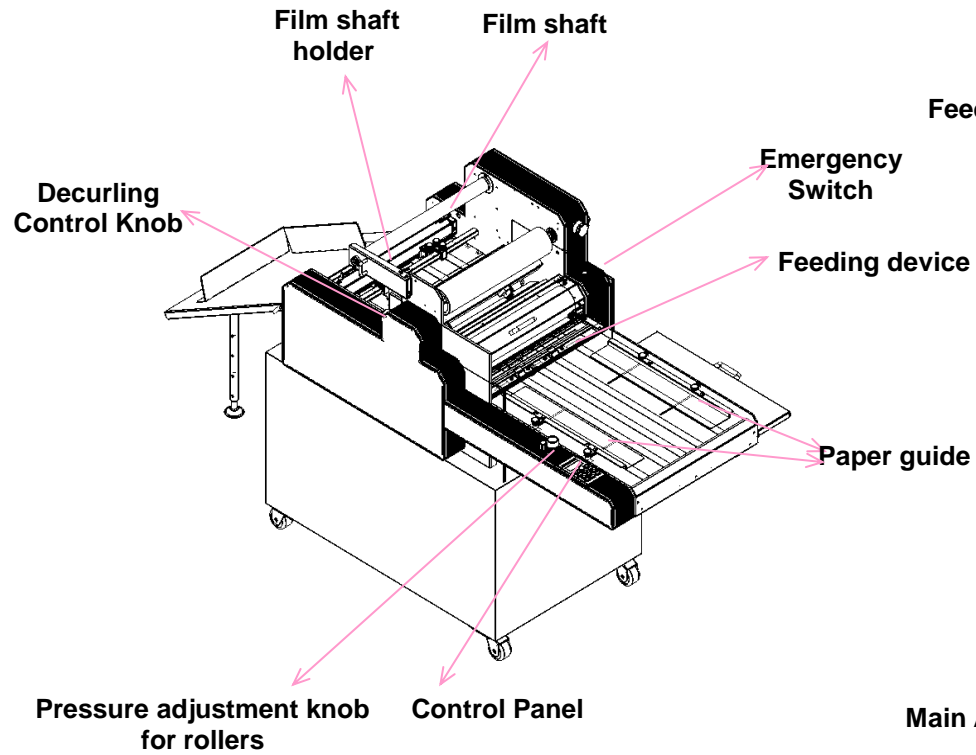
Contents

PROTOPIC II -540

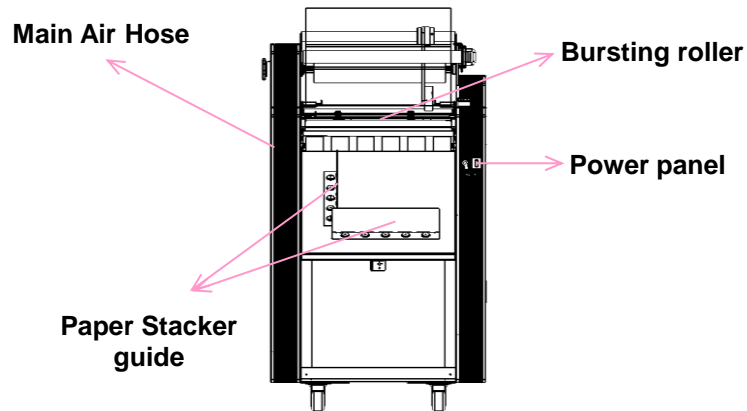
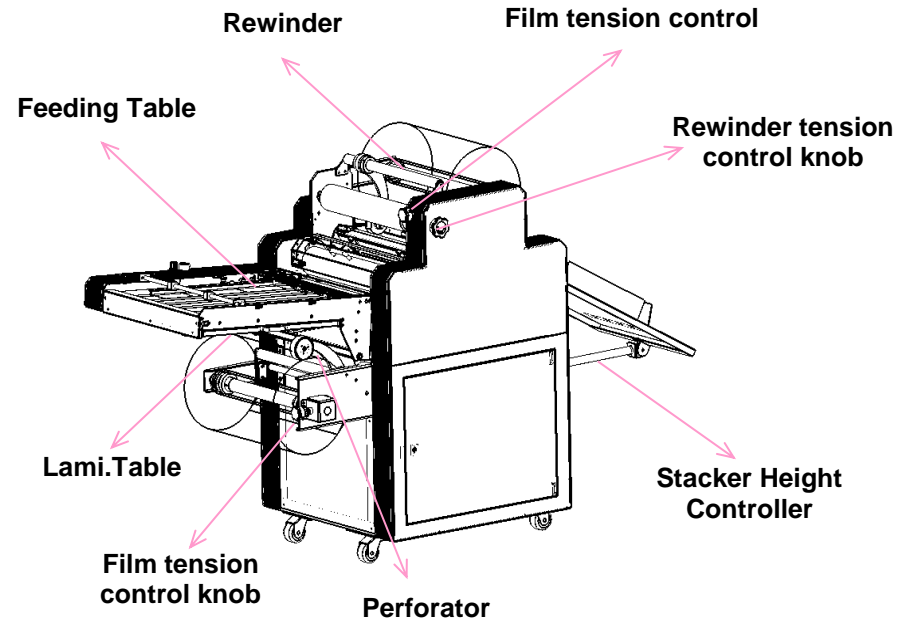
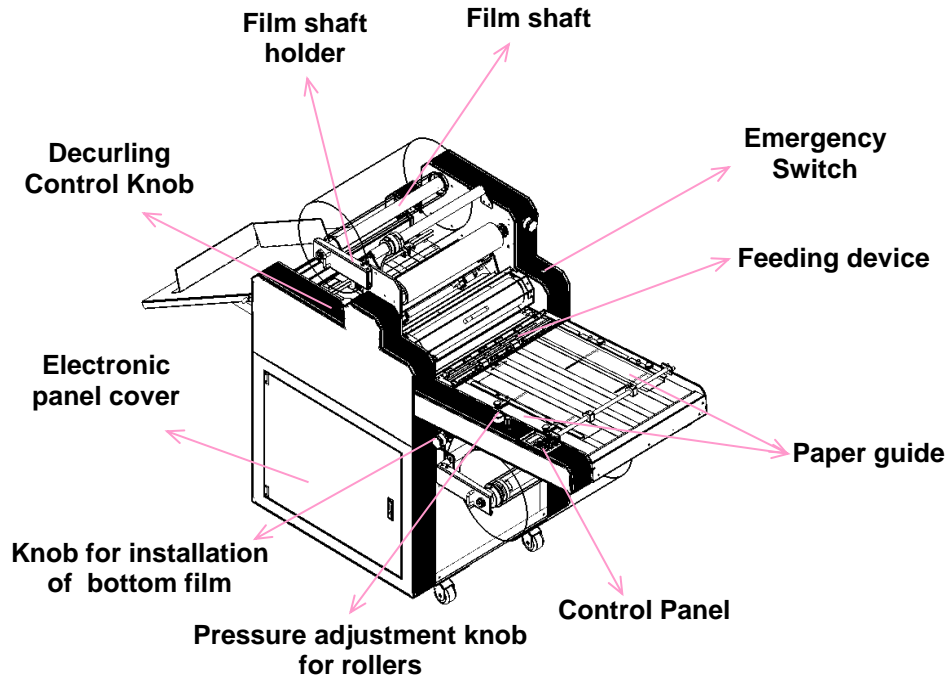


Name	EA
Laminator	1
Paper Stacker	1
Paper guide	2
Compressor	1
Air Hose	1
GLASS TUBE FUSE (20mm) 250V/8. - TIMEDELAY TYPE	6
GLASS TUBE FUSE (20mm) 250V/3. - TIMEDELAY TYPE	2
Wrench Set	1
Lami. Table (Option)	1
PROTOPIC-PLUS520 USER MANUA	1
Separator Idle Roller (Dual, Fuser)	1

Main Device (ProtopicII-540,Fuser,Dual)



Main Device (ProtopicII-540Duplex)






👉 Movement & Installation


Carriage & Installation

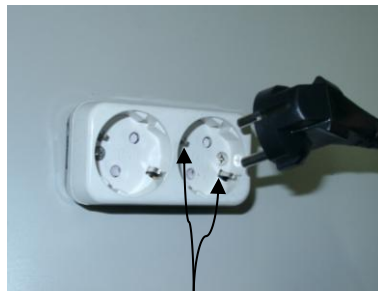
If you carry this product, Lifting Carriage is needed and it should be carried carefully.

Installation should be on a flat floor and balanced floor.

 **Warning :** Product is so heavy, necessarily 5~6 people are needed. It is a main reason of breakage and personal injury

Weight: 170kg, Lami. Table(Optional) weight: 75kg

 **Warning:** At the condition of product carriage, segregate plug from an outlet. If you don't, it a reason of electricity shock.



Grounding

Connecting Power

Power supply used with AC 220~240V/15A .

For safety, grounding is needed



Warning: For safety, grounding is necessarily needed

Mechanical disorder and electricity breakage can be a reason of electricity shock



Warning: Do not use many product simultaneously with one outlet. Outlet overheating can be a reason of fireflame.



Warning: Only use the specified power and voltage. It can be a reason of fireflame or an electricity fireflame.

Warning: Insert inside the outlet certainly. Outlet overheating a reason of a fireflame

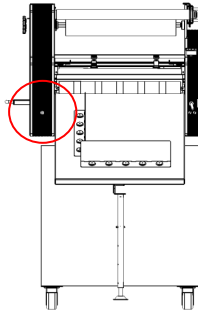
Compressor

☞ Compressor installation

Outer compressed air needs to be flowed into the laminator in order to activate the bursting roller and the pressure of the laminating roller.



Please insert air hose into the compressor



Please insert air hose into the product



After installing the compressor, pull the cap upward

i Reference: It is recommended to install the compressor outside the machine.

i Reference: Huge amount of moisture would be occurred in generation of Compressed Air.



Press the button upward like the picture

i Reference: A large amount of moisture (water) is produced from the compressor during its operation.
For dry filter, it is necessary to remove such moisture (water), at least, 1 time per a day.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Display

M: P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

JOB-MODE

There are 12 kinds of Job Modes and the Operator can save his/her own temp. & speed for their jobs.

	Applications	Temp./Speed
Poly-L	Polynex SuperMelt	100 °C/8
Poly-H	Polynex Standard, UltraBond	120 °C/8
Nylon	Nylonex	130 °C/8
PET-L	Perfex SuperMelt	90 °C/8
PET-H	Perfex Standard, UltraBond	110 °C/8
FUS-L	Fusing Indigo	125 °C/8
FUS-H	Fusing Toner	135 °C/8
MICRO	Micronex	120 °C/8
FOIL-L	Metallic Foil Transfer - Indigo	115 °C/8
FOIL-H	Metallic Foil Transfer - Toner	125 °C/8
User-1	Additional Setting by Operator	
User-2	Additional Setting by Operator	
User-3	Additional Setting by Operator	



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Display

M : P o l y — L S P D : 0 1
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 B U R S T : 6 1 5 C : 0 0 0 0
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M : P o l y — L **S P D : 0 1**
 T O P : 1 0 0 ° C R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

M : P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C **R E A D Y**
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

M : P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C R E A D Y
B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

Temp. Display

To show the Setting Temp. & Current Temp. for Laminating Roller
 Setting Range of Roller Temp. is "0~150°C".

How to check the Current Temp.

While the "MASTER DIAL" is pressed, the Current Temp. is displayed.



NOTE : Refer to the Buttons' Fuction for Temp. Setting.

Speed Display

To show the Laminating Speed
 Setting Range of Roller Speed is 1~14.



NOTE : Start at Lower Speed.

Job-Status Display

"WAIT" : Condition for Laminating is not ready yet (Temp. is low.).

"READY": Ready for Lamination. Please start Lamination.

Bursting Timing Display

To show the Operation Timing of Burst Roll.
 Setting Range of Cutting Timing is "580~660".
 Setting Value of 610~620 is recommended.



NOTE : Refer to the Buttons' Function for Cutting Timing Setting.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Display

M : P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

M : P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

M : P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N

Counting Display (for Daily)

To show the Laminated Sheets Q'ty.

It can be Reset.

While the Master Dial is press, the Speed Button is pressed, it can be reset.

Substrate Length Display

To show the Substrate Length

Setting Range of Substrate Length is 200~800mm.



NOTE : Refer to the Buttons' Function for Substrate Length Setting.

Setting for Integration with Beltfeeder-35

"MAN" : Mode for Manual Feeding - No Feeder / Only PROTOPIC machine is operated

"AUTO": Mode for AUTO Feeding - With Feeder

While the Stop Button is pressed, press the Master Dial to change the modes.

(Refer to the Explanation Sticker for Functions at the bottom side of Control Panel.)



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Display

M : P o l y — L S P D : 0 1
T O P : 1 0 0 ° C R E A D Y
B U R S T : 6 1 5 C : 0 0 0 0
" P O W E R O F F " M A N

Power Save Display

This equipment has Power-Save Function.

Stand-by Mode: If the temp. is higher than 80°C & the motor is stopped for 1 and half hours,

The mode is started and the Roller Temp. is maintained lower than 80°C.

Power Off Mode: If the equipment is stopped for 30 mins in Stand-by status, the mode is started.

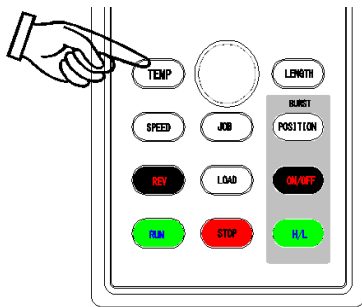
The power supply for Heater is stopped.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

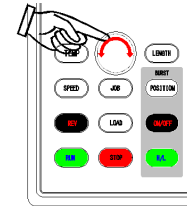
Explanation of Functions

"TEMP"



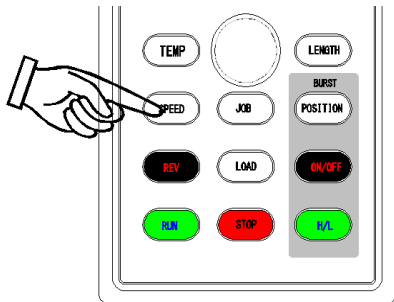
Function to set the Roller Temp.

1. Press the "TEMP" Button.
2. Adjust the "MASTER DIAL" to get the required Temp.



NOTE : The faster Laminating Speed makes the lower Temp. Keeping. Then, the Setting Temp has to be Adjusted for Laminating Conditions. Basically, 100~110°C is the Setting Range.

"SPEED"

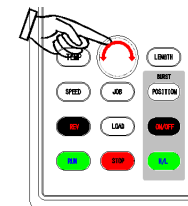


Function to set & to adjust Laminating Speed

1. Press the "SPEED" Button.
2. Adjust the "MASTER DIAL" to get the required Speed.

Adjust the Speed

- 1) Adjust the Speed while the Roller is rotating, the Speed is increased or decreased.
- 2) If the Speed is adjusted while the Roller is stopped, the Roller is not rotated and the value of Displayed Speed is changed
To rotate the Roller, the **"RUN" has to be pressed.**



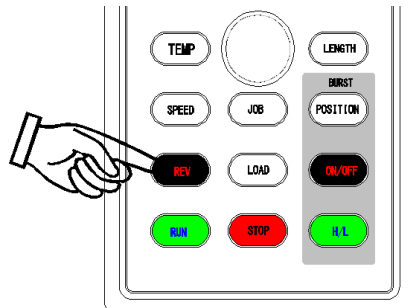
NOTE : Speed Range of Laminating is 1~14. Start at the Lower Speed.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Functions

"REV"



Function to Reverse Rotation of Roller

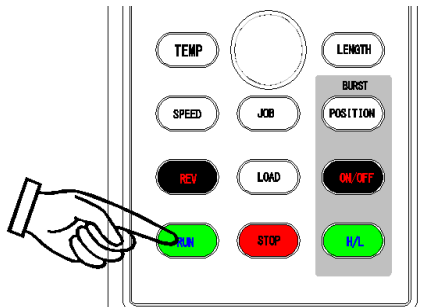
While the button is pressed, the Roller is rotated with engaged status.

When the button is not pressed, the Reverse Rotation is stopped and the Roller is disengaged.

This is useful function when Film or Paper is winding on the Roller.

NOTE : While the machine is operated, the function cannot be processed.

"RUN"



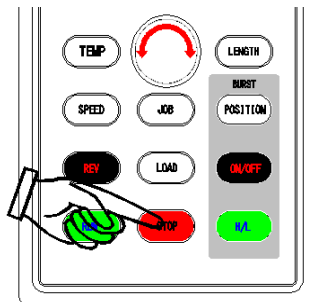
Function to Rotate the Roller for Laminating

Press the button to rotate the roller at setting speed.

Roller is rotated and engaged automatically.

NOTE : Start at Higher Speed could be a cause of Error.

"STOP"



Function to stop the Rotation of Roller

Press the button to stop rotation of the Roller.

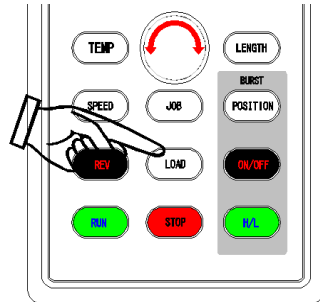
Roller is stopped and disengaged automatically.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Functions

"LOAD"



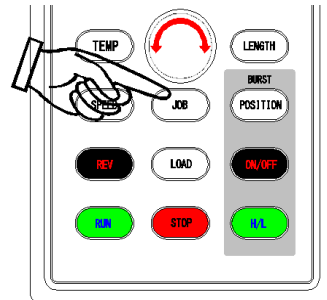
Button for Initial Setting & Film Loading

While the button is pressed, the Roller is rotated and Feeding Gate is opened for Easy Feeding.



NOTE : While the machine is operated, the function cannot be processed.

"JOB"



Set the Mode for Conditions of Film or Temp., etc.

In addition, the Regular Job Condition can be saved (Memory)

There are 12 kinds of Modes and the different kind of job conditions can be saved.

1. Press the Job Button and Rotate the Master Dial to have the required Job Mode.
2. Set the Job Condition (for 3 sec. later the value is saved automatically.)

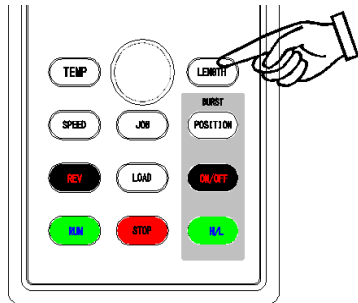
While the SPEED & STOP Buttons are pressed at the same time, each Job Modes values are reset.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Functions

"LENGTH"

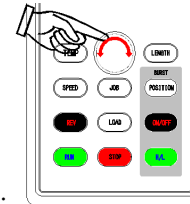


Function to set the Length of Substrate

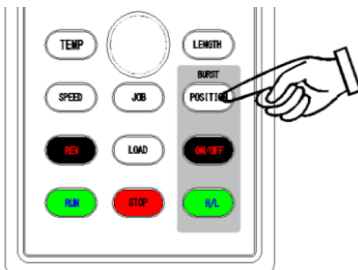
1. Press the "LENGTH" button.
2. Adjust the "MASTER DIAL" to set the required length.

The "overlap" must be between the substrates and 3 ~ 5mm is the recommended one.

NOTE : Overlap Value is different from Substrates' Material & Weights.

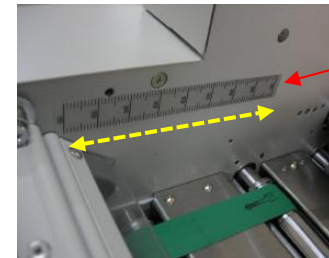


"POSITION"



Function to set the Operation Point for Burst Roller.

1. Press the "POSITION" button.
2. Adjust the "MASTER DIAL" to get the required point.



To set the value, refer to the SCALE on the Machine.

NOTE : Operation Point can be changed by Material, Thickness, Decurling Value, Laminating Speed.

Then, adjust the value for Bursting Status.

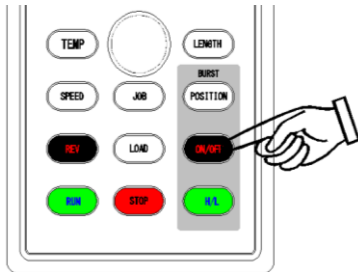
Basically, the Range of 610~620 is recommended.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

Explanation of Functions

"ON/OFF"



Function for Bursting On/Off

If the button is pressed, the Lamp is ON and the Burst Roller is operated.

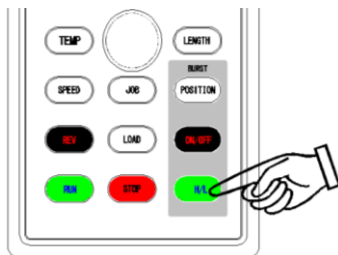
If the button is pressed again, the Lamp is OFF and the Burst Roller is stopped.



NOTE : Do not operate the above function at Initial Job and activate it when the Laminating is processed.

(Refer to the Laminating Sheet)

"H/L"



Function to increase the Burst Roller's Velocity

Use the function for NYLONEX(NYLON), PERFEX(PET) Films.

If the button is pressed, the Lamp is ON and the Burst Roller is rotated at high speed.

If the button is pressed again, the Lamp is OFF and the speed is reduced at the setting speed.



HOW TO USE THE DISPLAY PANEL (SINGLE/FUSER)

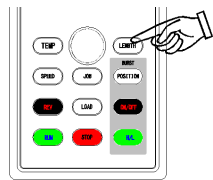
Explanation of Functional Operation Parts

"MASTER DIAL"

Dial to adjust the Roller Setting Temp., the Operation Point for Burst Roller and the Paper Length Setting Values.

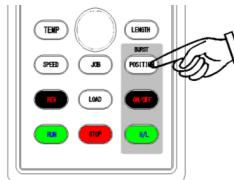
How to use Master Dial

1. Press the Function Button to adjust its values.



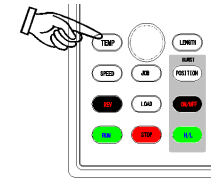
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Paper Length Setting



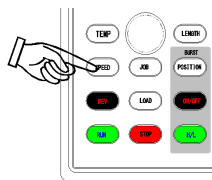
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Burst Roller Operation Setting



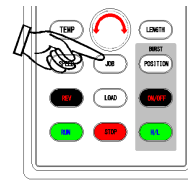
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Roller Temp. Setting



M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Laminating Speed Setting

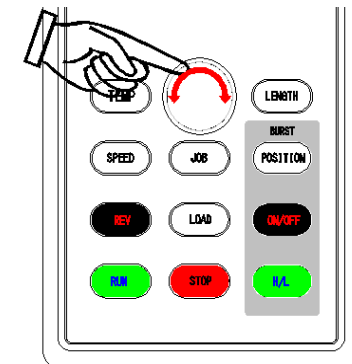


M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

JOB Mode Setting

2. Adjust the "MASTER DIAL" to set the required value.

Rotate the Dial to the Right, the value is increased, Rotate the Dial to the Left, it is decreased.





HOW TO USE THE DISPLAY PANEL(DUAL)

Explanation of Display

M: P o l y — L S P D : 0 1
F: 1 0 1 °C—W B : 0 8 1 0
R: 0 0 0 °C—W L : 0 3 0 5
C: 0 0 0 0 1

JOB-MODE

There are 12 kinds of Job Modes and the Operator can save his/her own temp. & speed for their jobs.

	Applications	Temp./Speed
Poly-L	Polynex SuperMelt	100°C/8
Poly-H	Polynex Standard, UltraBond	120°C/8
Nylon	Nylonex	130°C/8
PET-L	Perfex SuperMelt	90°C/8
PET-H	Perfex Standard, UltraBond	110°C/8
FUS-L	Fusing Indigo	125°C/8
FUS-H	Fusing Toner	135°C/8
MICRO	Micronex	120°C/8
FOIL-L	Metallic Foil Transfer - Indigo	115°C/8
FOIL-H	Metallic Foil Transfer - Toner	125°C/8
User-1	Additional Setting by Operator	
User-2	Additional Setting by Operator	
User-3	Additional Setting by Operator	



HOW TO USE THE DISPLAY PANEL(DUAL)

M: P o l y — L S P D : 0 1
 F: 1 0 1 °C — W B : 0 8 1 0
 R: 0 0 0 °C — W L : 0 3 0 5
 C: 0 0 0 0 1

Temp. Display

To show the Setting Temp. & Current Temp. for Laminating Roller & Embossing Roller

Setting Range of Roller Temp. is "0~150 °C".

F: 1 0 1 °C **Setting & MEAS Temperature of Laminating Roller**
 R: 0 0 0 °C **Setting & MEAS Temperature of Embossing Roller**

Temp. On : Mirror Roller Temperature

Temp. Off : Embo Roller Temperature

☞ How to check the Current Temp.


While the "MASTER DIAL" is pressed, the Current Temp. is displayed.

M: P o l y — L S P D : 0 1
 F: 1 0 1 °C — W B : 0 8 1 0
 R: 0 0 0 °C — W L : 0 3 0 5
 C: 0 0 0 0 1

Speed Display

To show the Laminating Speed

Setting Range of Roller Speed is 1~14.

 **NOTE : Start at Lower Speed.**

M: P o l y — L S P D : 0 1
 F: 1 0 1 °C — W B : 0 8 1 0
 R: 0 0 0 °C — W L : 0 3 0 5
 C: 0 0 0 0 1

Job-Status Display

"W" = WAIT : Condition for Laminating is not ready yet (Temp. is low.).

"R" = READY : Ready for Lamination. Please start Lamination.



HOW TO USE THE DISPLAY PANEL(DUAL)

M: P o l y—L S P D : 0 1
 F: 1 0 1 °C—W B : 0 8 1 0
 R: 0 0 0 °C—W L : 0 3 0 5
 C: 0 0 0 0 1

M: P o l y—L S P D : 0 1
 F: 1 0 1 °C—W B : 0 8 1 0
 R: 0 0 0 °C—W L : 0 3 0 5
 C: 0 0 0 0 1

M: P o l y—L S P D : 0 1
 F: 1 0 1 °C—W B : 0 8 1 0
 R: 0 0 0 °C—W L : 0 3 0 5
 C: 0 0 0 0 1

M: P o l y—L S P D : 0 1
 F: 1 0 1 °C—W B : 0 8 1 0
 R: 0 0 0 °C—W L : 0 3 0 5
 " P O W E R O F F "

Bursting Timing Display

To show the Operation Timing of Burst Roll.

Setting Range of Cutting Timing is "750 ~ 870".

Setting Value of 790~810 is recommended.



NOTE : Refer to the Buttons' Function for Cutting Timing Setting.

Substrate Length Display

To show the Substrate Length

Setting Range of Substrate Length is 200~800mm.



NOTE : Refer to the Buttons' Function for Substrate Length Setting.

Counting Display (for Daily)

To show the Laminated Sheets Q'ty.

It can be Reset.

While the Master Dial is press, the Speed Button is pressed, it can be reset.

Power Save Display

This equipment has Power-Save Function.

Stand-by Mode: If the temp. is higher than 80°C & the motor is stopped for 1 and half hours,

The mode is started and the Roller Temp. is maintained lower than 80°C.

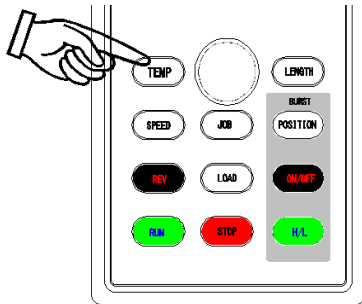
Power Off Mode: If the equipment is stopped for 30 mins in Stand-by status, the mode is started.

The power supply for Heater is stopped.



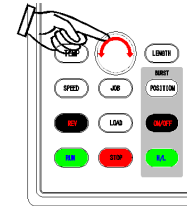
HOW TO USE THE DISPLAY PANEL(DUAL)

"TEMP"



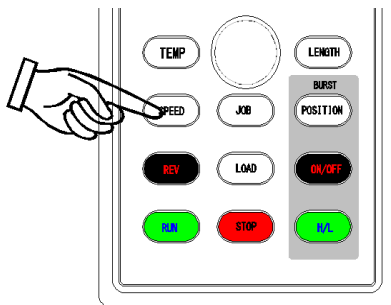
Function to set the Roller Temp.

1. Press the "TEMP" Button.
2. Adjust the "MASTER DIAL" to get the required Temp.



NOTE : The faster Laminating Speed makes the lower Temp. Keeping. Then, the Setting Temp has to be Adjusted for Laminating Conditions. Basically, 100~110°C is the Setting Range.

"SPEED"



Function to set & to adjust Laminating Speed

1. Press the "SPEED" Button.
2. Adjust the "MASTER DIAL" to get the required Speed.

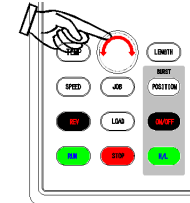
Adjust the Speed

- 1) Adjust the Speed while the Roller is rotating, the Speed is increased or decreased.
- 2) If the Speed is adjusted while the Roller is stopped, the Roller is not rotated and the value of Displayed Speed is changed.

To rotate the Roller, the "RUN" has to be pressed.



NOTE : Speed Range of Laminating is 1~14. Start at the Lower Speed.

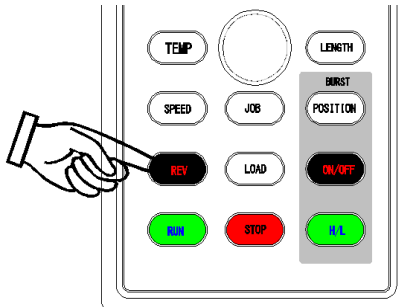




HOW TO USE THE DISPLAY PANEL(DUAL)

Explanation of Functions

"REV"



Function to Reverse Rotation of Roller

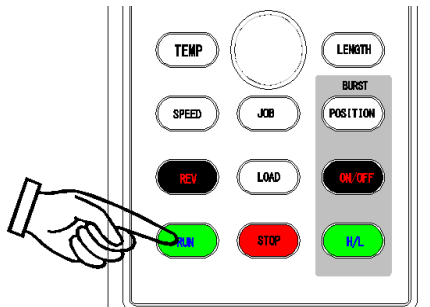
While the button is pressed, the Roller is rotated with engaged status.

When the button is not pressed, the Reverse Rotation is stopped and the Roller is disengaged.

This is useful function when Film or Paper is winding on the Roller.

NOTE : While the machine is operated, the function cannot be processed.

"RUN"



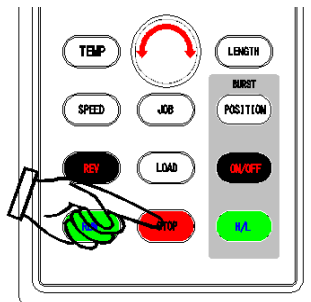
Function to Rotate the Roller for Laminating

Press the button to rotate the roller at setting speed.

Roller is rotated and engaged automatically.

NOTE : Start at Higher Speed could be a cause of Error.

"STOP"



Function to stop the Rotation of Roller

Press the button to stop rotation of the Roller.

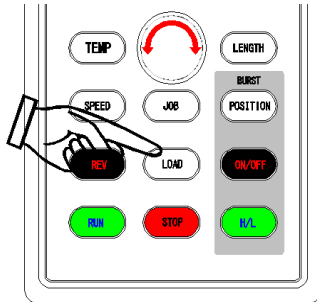
Roller is stopped and disengaged automatically.



HOW TO USE THE DISPLAY PANEL(DUAL)

Explanation of Functions

"LOAD"



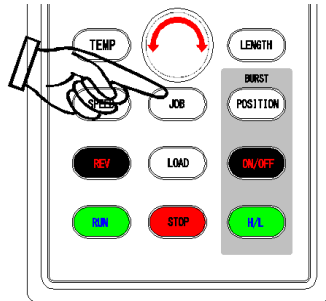
Button for Initial Setting & Film Loading

While the button is pressed, the Roller is rotated and Feeding Gate is opened for Easy Feeding.



NOTE : While the machine is operated, the function cannot be processed.

"JOB"



Set the Mode for Conditions of Film or Temp., etc.

In addition, the Regular Job Condition can be saved (Memory)

There are 12 kinds of Modes and the different kind of job conditions can be saved.

1. Press the Job Button and Rotate the Master Dial to have the required Job Mode.
2. Set the Job Condition (for 3 sec. later the value is saved automatically.)

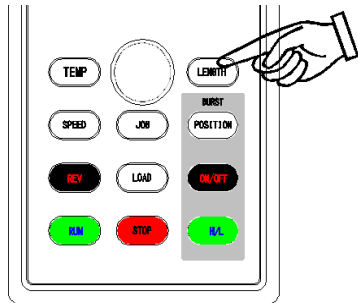
While the SPEED & STOP Buttons are pressed at the same time, each Job Modes values are reset.



HOW TO USE THE DISPLAY PANEL(DUAL)

Explanation of Functions

"LENGTH"

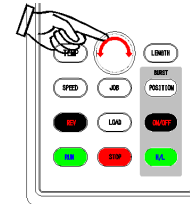


Function to set the Length of Substrate

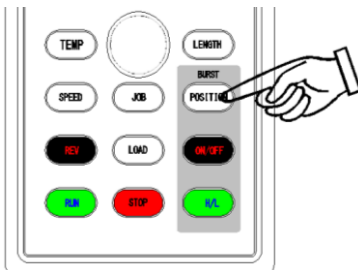
1. Press the "LENGTH" button.
2. Adjust the "MASTER DIAL" to set the required length.

The "overlap" must be between the substrates and 3 ~ 5mm is the recommended one.

NOTE : Overlap Value is different from Substrates' Material & Weights.

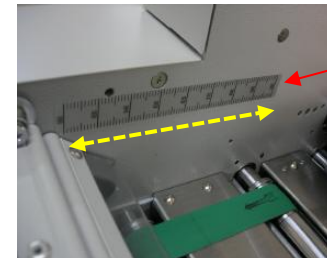


"POSITION"



Function to set the Operation Point for Burst Roller.

1. Press the "POSITION" button.
2. Adjust the "MASTER DIAL" to get the required point.



To set the value, refer to the SCALE on the Machine.

NOTE : Operation Point can be changed by Material, Thickness, Decurling Value, Laminating Speed.

Then, adjust the value for Bursting Status.

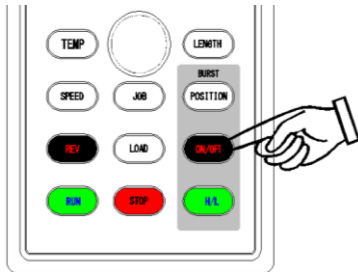
Basically, the Range of 610~620 is recommended.



HOW TO USE THE DISPLAY PANEL(DUAL)

Explanation of Functions

"ON/OFF"



Function for Bursting On/Off

If the button is pressed, the Lamp is ON and the Burst Roller is operated.

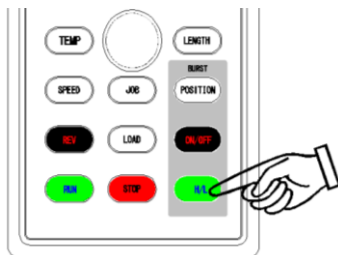
If the button is pressed again, the Lamp is OFF and the Burst Roller is stopped.



NOTE : Do not operate the above function at Initial Job and activate it when the Laminating is processed.

(Refer to the Laminating Sheet)

"H/L"



Function to increase the Burst Roller's Velocity

Use the function for NYLONEX(NYLON), PERFEX(PET) Films.

If the button is pressed, the Lamp is ON and the Burst Roller is rotated at high speed.

If the button is pressed again, the Lamp is OFF and the speed is reduced at the setting speed.



HOW TO USE THE DISPLAY PANEL(DUAL)

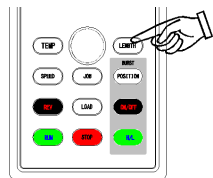
Explanation of Functional Operation Parts

"MASTER DIAL"

Dial to adjust the Roller Setting Temp., the Operation Point for Burst Roller and the Paper Length Setting Values.

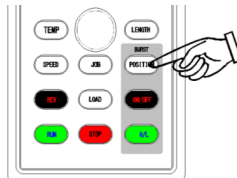
How to use Master Dial

1. Press the Function Button to adjust its values.



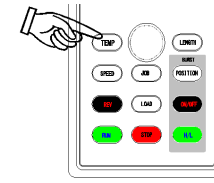
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Paper Length Setting



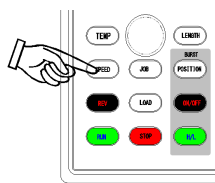
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Burst Roller Operation Setting



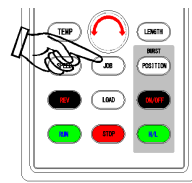
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Roller Temp. Setting



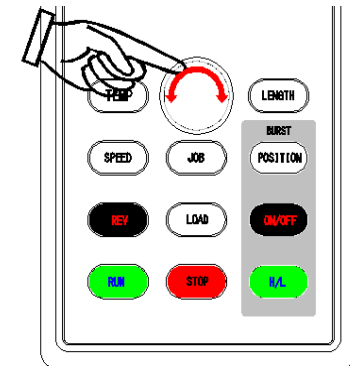
M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

Laminating Speed Setting



M: Poly-L SPD: 01
F: 101°C-W B: 0810
R: 000°C-W L: 0305
C: 00001

JOB Mode Setting



2. Adjust the "MASTER DIAL" to set the required value.

Rotate the Dial to the Right, the value is increased, Rotate the Dial to the Left, it is decreased.



HOW TO USE THE DISPLAY PANEL(DUPLEX)

Explanation of Display

M: P o l y — L S P D : 0 1
T: 1 0 1 °C—W B : 0 8 1 0
B: 0 0 0 °C—W L : 0 3 0 5
C: 0 0 0 0 1 S : M A N

JOB-MODE

There are 12 kinds of Job Modes and the Operator can save his/her own temp. & speed for their jobs.

	Applications	Temp./Speed
Poly-L	Polynex SuperMelt	100°C/8
Poly-H	Polynex Standard, UltraBond	120°C/8
Nylon	Nylonex	130°C/8
PET-L	Perfex SuperMelt	90°C/8
PET-H	Perfex Standard, UltraBond	110°C/8
FUS-L	Fusing Indigo	125°C/8
FUS-H	Fusing Toner	135°C/8
MICRO	Micronex	120°C/8
FOIL-L	Metallic Foil Transfer - Indigo	115°C/8
FOIL-H	Metallic Foil Transfer - Toner	125°C/8
User-1	Additional Setting by Operator	
User-2	Additional Setting by Operator	
User-3	Additional Setting by Operator	



HOW TO USE THE DISPLAY PANEL(DUPLEX)

M: P o l y — L S P D : 0 1
 T: 1 0 1 °C — W B : 0 8 1 0
 B: 0 0 0 °C — W L : 0 3 0 5
 C: 0 0 0 0 1 S : M A N

Temp. Display

To show the Setting Temp. & Current Temp. for Laminating Roller & Embossing Roller

Setting Range of Roller Temp. is "0~150 °C".

T: 1 0 1 °C **Setting & MEAS Temperature of Laminating Roller**
 B: 0 0 0 °C **Setting & MEAS Temperature of Nip Roller**

☞ How to check the Current Temp.


While the "MASTER DIAL" is pressed, the Current Temp. is displayed.

M: P o l y — L S P D : 0 1
 T: 1 0 1 °C — W B : 0 8 1 0
 B: 0 0 0 °C — W L : 0 3 0 5
 C: 0 0 0 0 1 S : M A N

Speed Display

To show the Laminating Speed

Setting Range of Roller Speed is 1~14.

 **NOTE : Start at Lower Speed.**

M: P o l y — L S P D : 0 1
 T: 1 0 1 °C — W B : 0 8 1 0
 B: 0 0 0 °C — W L : 0 3 0 5
 C: 0 0 0 0 1 S : M A N

Job-Status Display

"W" = WAIT : Condition for Laminating is not ready yet (Temp. is low.).

"R" = READY : Ready for Lamination. Please start Lamination.



HOW TO USE THE DISPLAY PANEL(DUPLEX)

M: P o l y—L S P D : 0 1
 T: 1 0 1 °C—W B : 0 8 1 0
 B: 0 0 0 °C—W L : 0 3 0 5
 C: 0 0 0 0 1 S : M A N

M: P o l y—L S P D : 0 1
 T: 1 0 1 °C—W B : 0 8 1 0
 B: 0 0 0 °C—W L : 0 3 0 5
 C: 0 0 0 0 1 S : M A N

M: P o l y—L S P D : 0 1
 T: 1 0 1 °C—W B : 0 8 1 0
 B: 0 0 0 °C—W L : 0 3 0 5
 C: 0 0 0 0 1 S : M A N

M: P o l y—L S P D : 0 1
 T: 1 0 1 °C—W B : 0 8 1 0
 B: 0 0 0 °C—W L : 0 3 0 5
 " P O W E R O F F "

Bursting Timing Display

To show the Operation Timing of Burst Roll.

Setting Range of Cutting Timing is "750 ~ 870".

Setting Value of 790~810 is recommended.



NOTE : Refer to the Buttons' Function for Cutting Timing Setting.

Substrate Length Display

To show the Substrate Length

Setting Range of Substrate Length is 200~800mm.



NOTE : Refer to the Buttons' Function for Substrate Length Setting.

Counting Display (for Daily)

To show the Laminated Sheets Q'ty.

It can be Reset.

While the Master Dial is press, the Speed Button is pressed, it can be reset.

Power Save Display

This equipment has Power-Save Function.

Stand-by Mode: If the temp. is higher than 80°C & the motor is stopped for 1 and half hours,

The mode is started and the Roller Temp. is maintained lower than 80°C.

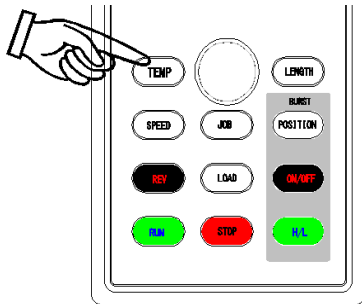
Power Off Mode: If the equipment is stopped for 30 mins in Stand-by status, the mode is started.

The power supply for Heater is stopped.



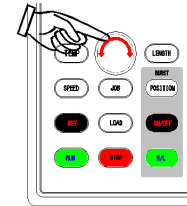
HOW TO USE THE DISPLAY PANEL(DUPLEX)

"TEMP"



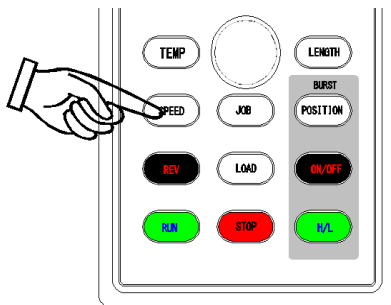
Function to set the Roller Temp.

1. Press the "TEMP" Button.
2. Adjust the "MASTER DIAL" to get the required Temp.



NOTE : The faster Laminating Speed makes the lower Temp. Keeping. Then, the Setting Temp has to be Adjusted for Laminating Conditions. Basically, 100~110°C is the Setting Range.

"SPEED"



Function to set & to adjust Laminating Speed

1. Press the "SPEED" Button.
2. Adjust the "MASTER DIAL" to get the required Speed.

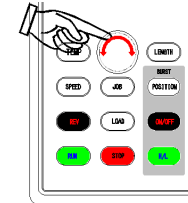
Adjust the Speed

- 1) Adjust the Speed while the Roller is rotating, the Speed is increased or decreased.
- 2) If the Speed is adjusted while the Roller is stopped, the Roller is not rotated and the value of Displayed Speed is changed.

To rotate the Roller, the "RUN" has to be pressed.



NOTE : Speed Range of Laminating is 1~14. Start at the Lower Speed.

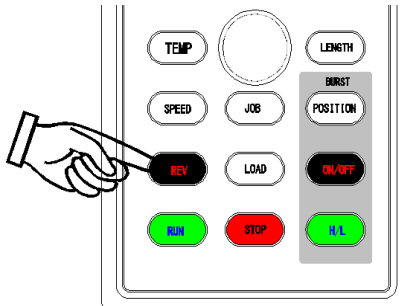




HOW TO USE THE DISPLAY PANEL(DUPLEX)

Explanation of Functions

"REV"



Function to Reverse Rotation of Roller

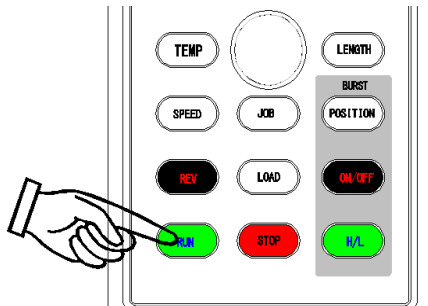
While the button is pressed, the Roller is rotated with engaged status.

When the button is not pressed, the Reverse Rotation is stopped and the Roller is disengaged.

This is useful function when Film or Paper is winding on the Roller.

NOTE : While the machine is operated, the function cannot be processed.

"RUN"



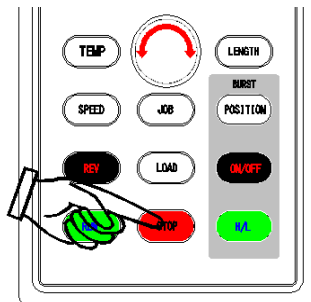
Function to Rotate the Roller for Laminating

Press the button to rotate the roller at setting speed.

Roller is rotated and engaged automatically.

NOTE : Start at Higher Speed could be a cause of Error.

"STOP"



Function to stop the Rotation of Roller

Press the button to stop rotation of the Roller.

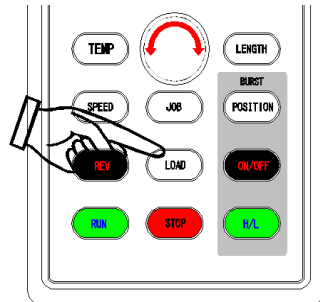
Roller is stopped and disengaged automatically.



HOW TO USE THE DISPLAY PANEL(DUPLEX)

Explanation of Functions

"LOAD"



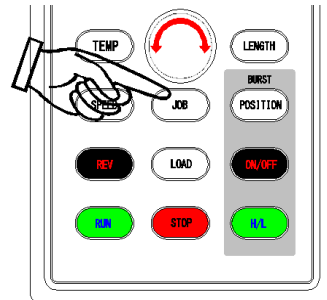
Button for Initial Setting & Film Loading

While the button is pressed, the Roller is rotated and Feeding Gate is opened for Easy Feeding.



NOTE : While the machine is operated, the function cannot be processed.

"JOB"



Set the Mode for Conditions of Film or Temp., etc.

In addition, the Regular Job Condition can be saved (Memory)

There are 12 kinds of Modes and the different kind of job conditions can be saved.

1. Press the Job Button and Rotate the Master Dial to have the required Job Mode.
2. Set the Job Condition (for 3 sec. later the value is saved automatically.)

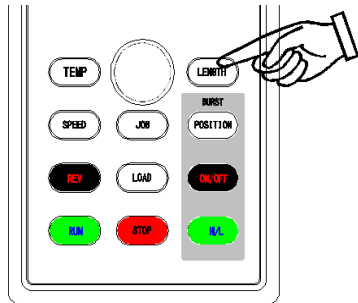
While the SPEED & STOP Buttons are pressed at the same time, each Job Modes values are reset.



HOW TO USE THE DISPLAY PANEL(DUPLEX)

Explanation of Functions

"LENGTH"

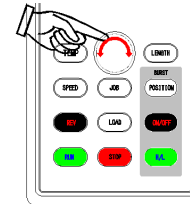


Function to set the Length of Substrate

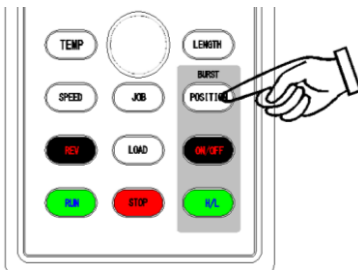
1. Press the "LENGTH" button.
2. Adjust the "MASTER DIAL" to set the required length.

The "overlap" must be between the substrates and 3 ~ 5mm is the recommended one.

NOTE : Overlap Value is different from Substrates' Material & Weights.

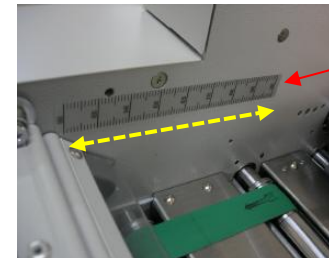


"POSITION"



Function to set the Operation Point for Burst Roller.

1. Press the "POSITION" button.
2. Adjust the "MASTER DIAL" to get the required point.



To set the value, refer to the SCALE on the Machine.

NOTE : Operation Point can be changed by Material, Thickness, Decurling Value, Laminating Speed.

Then, adjust the value for Bursting Status.

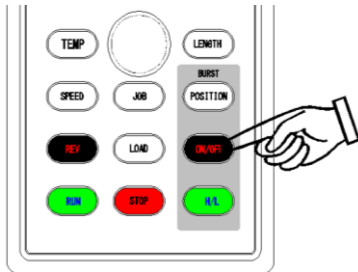
Basically, the Range of 610~620 is recommended.



HOW TO USE THE DISPLAY PANEL(DUPLEX)

Explanation of Functions

"ON/OFF"



Function for Bursting On/Off

If the button is pressed, the Lamp is ON and the Burst Roller is operated.

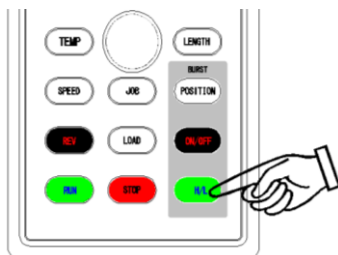
If the button is pressed again, the Lamp is OFF and the Burst Roller is stopped.



NOTE : Do not operate the above function at Initial Job and activate it when the Laminating is processed.

(Refer to the Laminating Sheet)

"H/L"



Function to increase the Burst Roller's Velocity

Use the function for NYLONEX(NYLON), PERFEX(PET) Films.

If the button is pressed, the Lamp is ON and the Burst Roller is rotated at high speed.

If the button is pressed again, the Lamp is OFF and the speed is reduced at the setting speed.



HOW TO USE THE DISPLAY PANEL(DUPLEX)

Explanation of Functional Operation Parts

"MASTER DIAL"

Dial to adjust the Roller Setting Temp., the Operation Point for Burst Roller and the Paper Length Setting Values.

How to use Master Dial

1. Press the Function Button to adjust its values.

The first diagram shows the control panel with the Master Dial being turned. The display shows: M: Poly-L SPD: 01, T: 101°C-W B: 0810, B: 000°C-W L: 0305, C: 00001 S: MAN. The 'L' value is highlighted in orange. Below it is the label "Paper Length Setting".

The second diagram shows the control panel with the Master Dial being turned. The display shows: M: Poly-L SPD: 01, T: 101°C-W B: 0810, B: 000°C-W L: 0305, C: 00001 S: MAN. The 'B' value is highlighted in orange. Below it is the label "Burst Roller Operation Setting".

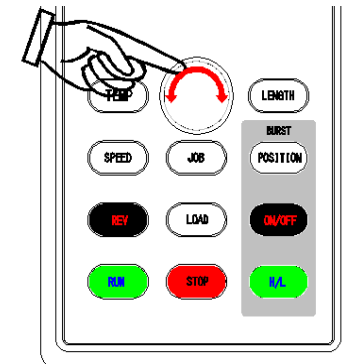
The third diagram shows the control panel with the Master Dial being turned. The display shows: M: Poly-L SPD: 01, T: 101°C-W B: 0810, B: 000°C-W L: 0305, C: 00001 S: MAN. The 'T' value is highlighted in orange. Below it is the label "Roller Temp. Setting".

The fourth diagram shows the control panel with the Master Dial being turned. The display shows: M: Poly-L SPD: 01, T: 101°C-W B: 0810, B: 000°C-W L: 0305, C: 00001 S: MAN. The 'SPD' value is highlighted in orange. Below it is the label "Laminating Speed Setting".

The fifth diagram shows the control panel with the Master Dial being turned. The display shows: M: Poly-L SPD: 01, T: 101°C-W B: 0810, B: 000°C-W L: 0305, C: 00001 S: MAN. The 'M' value is highlighted in orange. Below it is the label "JOB Mode Setting".

2. Adjust the "MASTER DIAL" to set the required value.

Rotate the Dial to the Right, the value is increased, Rotate the Dial to the Left, it is decreased.

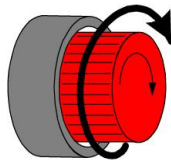
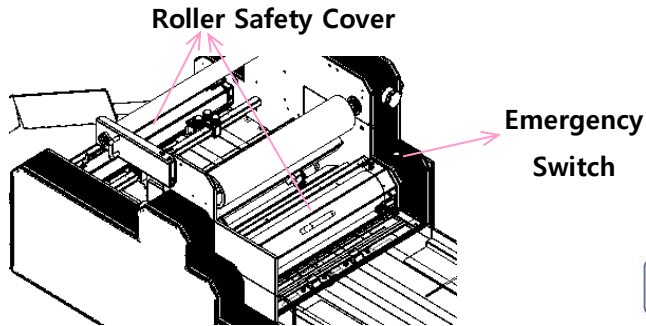


Error Messages

M : P o l y — L S P D : 0 1
 T O P : 1 0 0 ° C R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
E M S & C O V E R O P E N ! !

"EMS & COVER OPEN!!"

This message is shown when the Roller Safety Cover is opened or the Emergency Switch is pressed. When the Emergency Switch is pressed, the Roller & the System are stopped. Roller Safety Cover is to avoid a damage by Heat Roller. Then, it always be closed except for the film loading.



**Turn Right to Release
from the Emergency**



NOTE : This message is displayed for 3 seconds when the "RUN" button is pressed.

"S-opn"

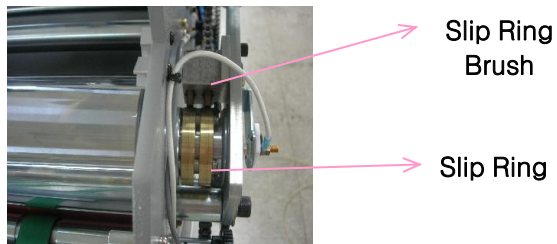
This message is displayed for the below cases.

- 1) If a contact between the Slip Ring and the Brush is not normal.
 - Check there is a substances between the Slip Ring and the Brush. If so, please remove it.
 - Check the contact status between the Slip Ring and the Brush.
 - If the Brush is not contacted to the Slip Ring, disassemble the Brush and check its tension.
- 2) Sensor Wire is disconnected.
 - Ask to the supplier.
- 3) Trouble with the Main PCB
 - Ask to the supplier.



CAUTION : Power has to be off for checking.

M : P o l y — L S P D : 0 1
T O P : S - o p n R E A D Y
 B U R S T : 6 1 5 C : 0 0 0 0
 L E N G T H : 0 3 1 1 M A N



 **Error Message**

M : P o l y - L S P D : 0 1
T O P : O v r - H R E A D Y
B U R S T : 6 1 5 C : 0 0 0 0
L E N G T H : 0 3 1 1 M A N

"Ovr-H"

This message is displayed when the Laminating Roller Temp. is higher than 170°C.

This is caused by a trouble in the Heater Controller.

Ask to the supplier.



How to use Laminating Devices (SINGLE/FUSER)

Laminating Devices

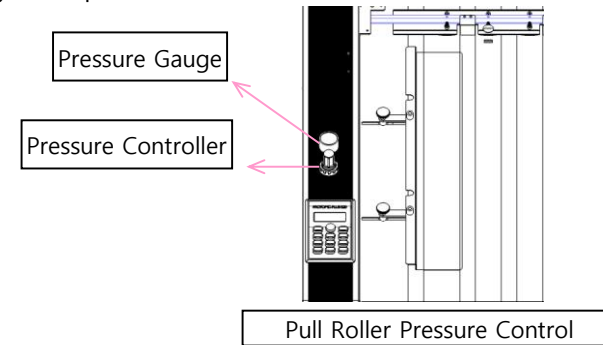
How to adjust the Pressure on Laminating Roller

Pressure on Laminating Roller & Embossing Roller can be adjusted by the Pressure Controller and its value is displayed on the gauge.

Pull the Pressure Controller to adjust the pressure strength, then after the pressure is adjusted, press it to fix.

Turn the Controller to the right to increase the pressure strength.

Turn the Controller to the left to decrease the pressure strength.



NOTE : Pressure could be adjusted by film or substrate.

The Max. Pressure is less than 0.6MPa(6kg/cm²).

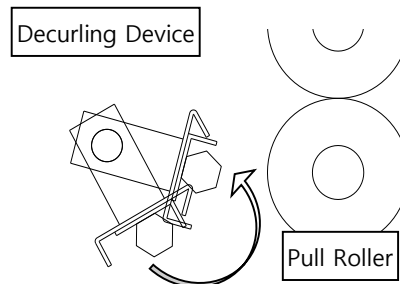
Adjustment of Decurling Value

It is natural phenomenon for single side lamination to have decurling after lamination. This is not caused by a trouble of laminator.

Decurling Device to avoid a curling after single side lamination.

The curling status on the laminated results can be adjusted by the Decurling Adjustment Handle.

Turn it to the Right to increase its decurling value. Turn it to the Left to decrease the decurling value.



Curling Status when the handle is turned to the right.

Curling Status when the handle is turned to the left.

NOTE : Adjust the Decurling Device Angle for the Substrates' Thickness & Materials.



How to use Laminating Devices (**SINGLE/FUSER**)

How to use Laminating Devices

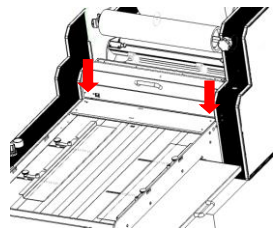
Adjustment of Pressure for Feeder

This device is the height-adjustable function for various kinds of substrates.

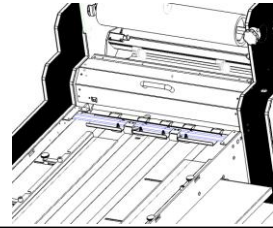
For substrates' thickness and surface status, the stop shutter height on the feeder has to be adjusted.

If it would not be adjusted, this could be a cause of trouble (twist, miss feeding) in feeding process.

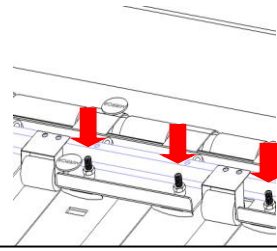
These below is to adjust the pressure.



1. Remove Cover Fixing Bolt



2. Remove Cover



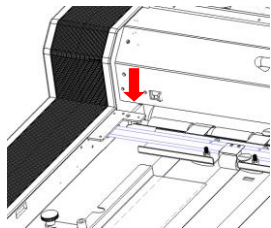
3. Adjust its height of Pressure Adjustment Bolt



NOTE : After adjustment of the Pressure, try to laminate for test of pressure status.

Feeding Indicator

This device is an indicator for feeding time (to put the substrate on the feeding table.)



"LAMP ON" : Feeder is operated. Substrates are fed for lamination.

"LAMP OFF" : Feeder is stopped. Substrates are on the feeding table.



How to use Laminating Devices (SINGLE/FUSER)

How to use Laminating Devices

☞ Tension Adjustment of Conveyor Belt

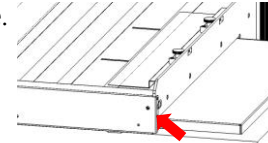
Long term lamination could make tension of Conveyor Belt on the Feeding Table loose.

Low tension of Conveyor Belt could make trouble of substrate feeding process.

Adjust the tension with tension adjustment bolt which are located at the feeding table.

Turn the bolt to the right to increase tension. Turn it to the left to decrease tension.

(Adjust the bolt with 5mm Wrench that is supplied with the laminator.)



Tension Adjustment Bolt



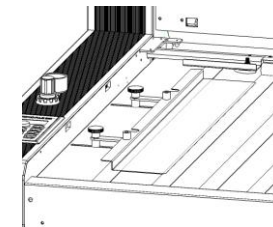
NOTE : Disassemble the Cover to adjust the bolt.

☞ Paper Guide

To avoid twist of feeding substrates. It can be adjusted for substrates' widths.

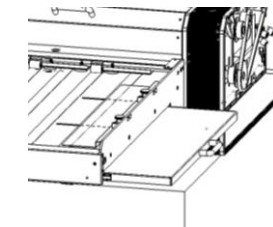
Fix the guides with Fixing Knob after the it is adjusted.

For exact feeding condition, the Paper Guide has to be aligned properly.



☞ Extra Paper Guide

For the various substrates widths, it is required to have the extra guide to avoid trouble between the paper guide and conveyor belt for substrate setting, It has magnetics for easy adjustment of its position.





How to use Laminating Devices (**SINGLE/FUSER**)

How to use Laminating Devices

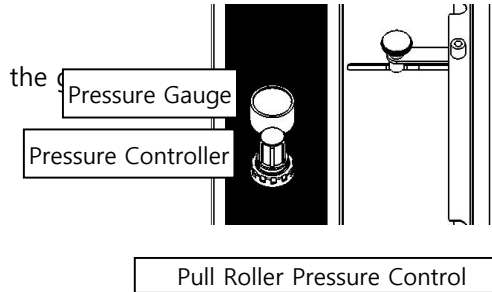
Adjustment of Pull Roller

It is same as the adjustment of Laminating Roller.

Laminating Roller Pressure can be adjusted by Pressure Controller and Pressure is displayed on the

NOTE : Pressure could be adjusted by film or substrate.

The Max. Pressure is less than 0.6MPa(6kg/cm²).





How to use Laminating Devices (**SINGLE/FUSER**)

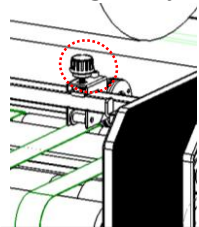
How to use Cutting Devices

Adjustment of Perforator

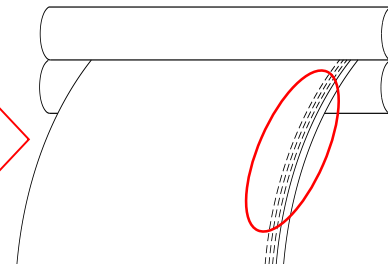
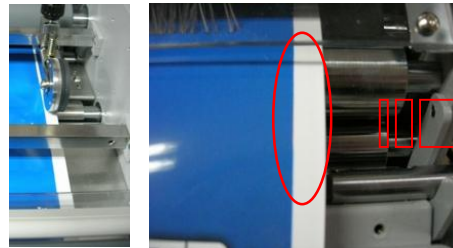
Perforator is to make holes in a row at the edge side of film to cut it easily.

Place it at the 1~3mm from the film edge.

With Height Adjustment Bolt of Perforator, set the pressure till it make holes on the laminated results.



Height Adjustment Bolt



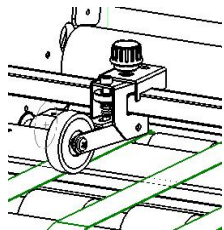
WARNING : In case of initial loading status or if it is required to move (right / left) the perforator, release the height adjustment bolt. Otherwise, this could be a cause of damage on the blade or roller.

Skewing Wheel

To support the cutting of laminated results and it is effective to avoid the films are torn out after lamination.

Install the device to make winding laminated results to delay its exit for the better cutting quality.

Skewing Wheel Angle has to be adjusted to avoid substrate fold.



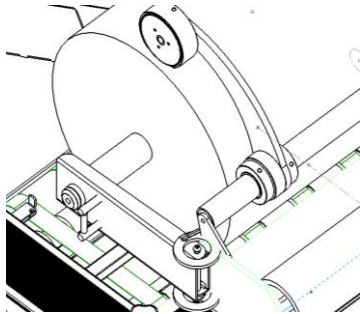
WARNING : Laminated Results could be folded if the skewing wheel is not set properly.



How to use Laminating Devices (**SINGLE/FUSER**)

How to load / replace Films

Structure for Film Shaft



1. Film Shaft : To load laminating roll film.
2. Film Shaft Holder Fixing Pin : To fix the Film Shaft Holder Position.
3. Film Shaft Holder : To avoid movement of Film Shaft.
4. Film Core : To fix laminating roll film.

How to load Laminating Film

Film width has to be narrower than substrate's one by 5~10mm.

1. Remove the Film Shaft Holder Fixing Pin.
2. Open the Film Shaft Holder.
3. Load / Remove Laminating Film on the Film Shaft.
 - Pull the Fixing Ring on the Film Core out and load Laminating Film.
 - Place Laminating Film properly and tight up the Film Core Fixing Bolt. (Use 5mm Wrench that is packed with the machine.)
4. Close the Film Shaft Holder and fix it with the Film Shaft Holder Fixing Pin.



WARNING : Laminating Film is heavy, then it requires more than 2 persons for film loading. Otherwise, this could be a cause of injury.



How to use Laminating Devices (**SINGLE/FUSER**)

How to load / replace Films

Setting of Laminating Film

For single side lamination, substrate width has to be wider than laminating film width by around 5~10mm.

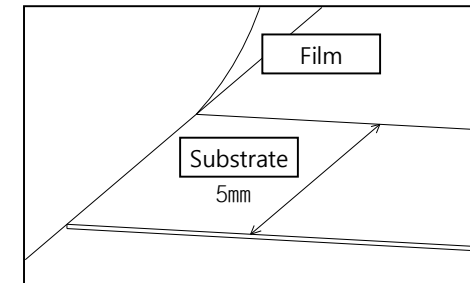
If laminating film width would be wider than substrate width, this could be a cause of contamination / damage on the roller.

Place Laminating Film inside from the edge of substrate by 3~5mm as the below picture.



WARNING : Film width has to be narrower than substrate width by around 5~10mm.

Otherwise, this could be a cause of trouble.



Side Slitter & Rewinder

To slit the remnant width if Laminating Roll Film width is wider than Substrate.

As on the right picture, place the slitter in proper position and slit it.

Slitted remnant film has to be rewinded on the Rewinder.

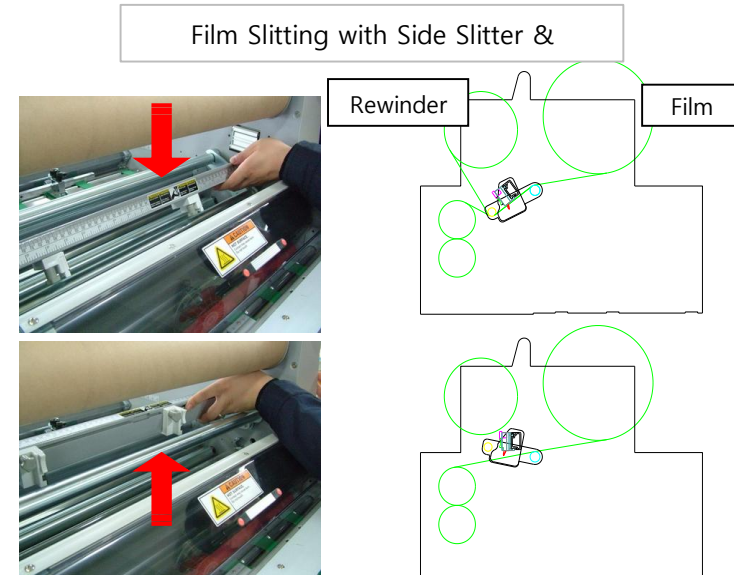


NOTE : This device for easy film loading, it can be moved to up/downward.



WARNING : Sharp Blade could be a cause of injury.

Be careful to set the slitter.





How to use Laminating Devices (**SINGLE/FUSER**)

Other Devices

☞ Power Switch

Power Switch is to supply / stop the power for the Laminator.

Press "I" for Power On and Press "O" for Power Off.

The device has overcurrent circuit breaker to stop the power supply in case of overload or overcurrent is occurred in the laminator.



NOTE : If the Power Off is occurred for more than 2 times consecutively, please contact to the supplier.



NOTE : How to replace the FUSE

1> Pull the FUSE HOLDER from the area.

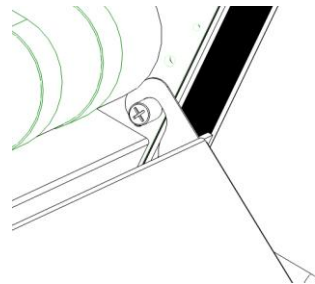
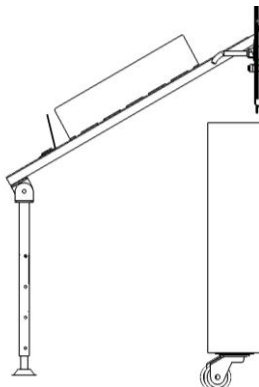
With "-" screw driver, press FUSE HOLDER gently and rotate it.

2> Remove the troubled FUSE and replace it with the Spare FUSE (is packed with the machine). (Prior to replacement, check its specificati

☞ Tray Table

This is to arrange laminated results easily.

Guide can be adjusted for substrates width / length.





How to use Laminating Devices (DUAL)

Laminating Devices (DUAL)

How to adjust the Pressure on Laminating Roller

Pressure on Laminating Roller & Embossing Roller can be adjusted by the Pressure Controller and its value is displayed on the gauge.

Pull the Pressure Controller to adjust the pressure strength, then after the pressure is adjusted, press it to fix.

Turn the Controller to the right to increase the pressure strength.

Turn the Controller to the left to decrease the pressure strength.

NOTE : Pressure could be adjusted by film or substrate.
The Max. Pressure is less than 0.6MPa(6kg/cm²).



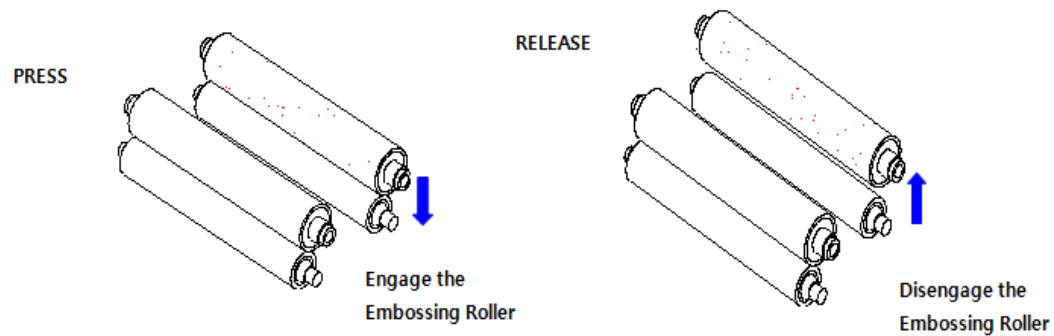
Engage / Disengage Switch for Embossing Roller



This is to engage / disengage the Embossing Roller.(for Embossing Lamination)

PRESS to engage the Embossing Roller and the Embossing Lamination is started.

RELEASE to disengage the Embossing Roller.





How to use Laminating Devices (DUAL)

How to use Embossing

☞ Embossing Patterns (Optional)



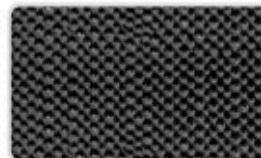
Fine Texture



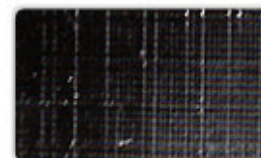
Hair Line



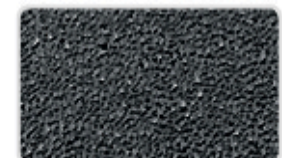
Leather



Linen Texture



Silky Texture



Sparkler

Various Embossing Effects are available with the optional embossing rollers.

☞ Cooling Device for Embossing Roller (Optional)



This device to keep the temperature for Embossing Roller.

This is to keep high quality of embossing lamination.

Air Blow Amount can be adjusted by the Valve.



NOTE : Due to the cooled air, the surface of the device could have dew condensation.

It is natural phenomenon. (Not caused by a trouble in the device.)



How to use Laminating Devices (DUAL)

How to use Laminating Devices

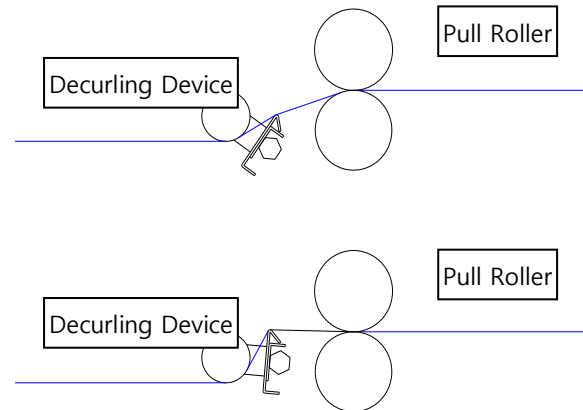
Adjustment of Decurling Value

It is natural phenomenon for single side lamination to have decurling after lamination. This is not caused by a trouble of laminator.

Decurling Device to avoid a curling after single side lamination.

The curling status on the laminated results can be adjusted by the Decurling Adjustment Handle.

Turn it to the Right to increase its decurling value. Turn it to the Left to decrease the decurling value.



Curling Status when the handle is turned to the right.

Curling Status when the handle is turned to the left.



NOTE : Adjust the Decurling Device Angle for the Substrates' Thickness & Materials.



How to use Laminating Devices (DUAL)

How to use Laminating Devices

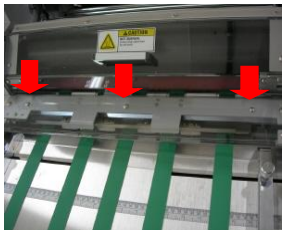
☞ Adjustment of Pressure for Feeder

This device is the height-adjustable function for various kinds of substrates.

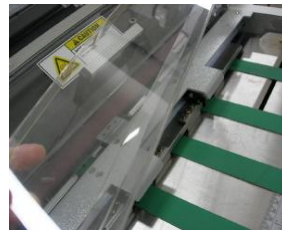
For substrates' thickness and surface status, the stop shutter height on the feeder has to be adjusted.

If it would not be adjusted, this could be a cause of trouble (twist, miss feeding) in feeding process.

These below is to adjust the pressure.



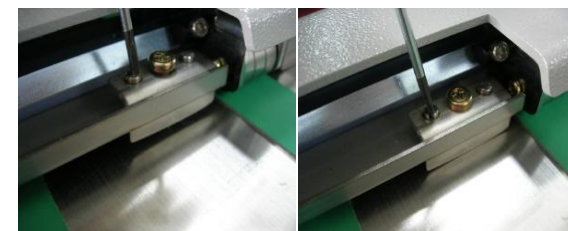
1. Remove Cover Fixing Bolt



2. Remove Cover



3. Remove Fixing Bolt



4. Adjust its height of Pressure Adjustment Bolt



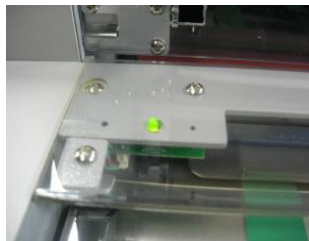
NOTE : After adjustment of the Pressure, try to laminate for test of pressure status.

☞ Feeding Indicator

This device is an indicator for feeding time (to put the substrate on the feeding table.)

When it is lighted on, put substrate on the feeding table. Feeding Device controls feeding gap between the substrates automatically.

Transparent Cover provide a condition to check substrate feeding status & stop shutter height.



"LAMP ON" : Feeder is operated. Substrates are fed for lamination.

"LAMP OFF" : Feeder is stopped. Substrates are on the feeding table.

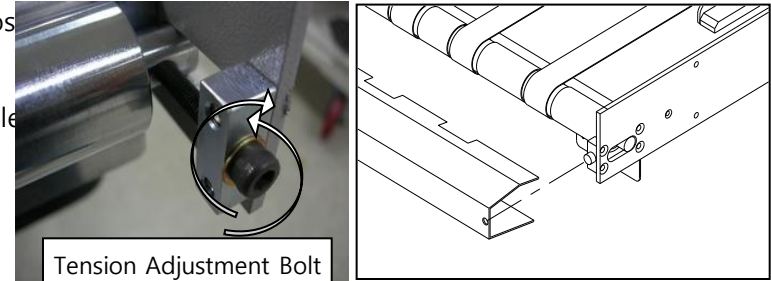


How to use Laminating Devices (DUAL)

How to use Laminating Devices

☞ Tension Adjustment of Conveyor Belt

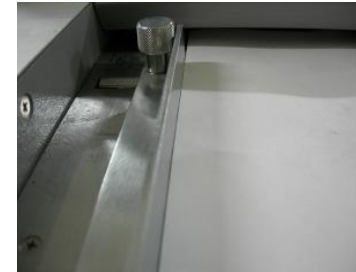
Long term lamination could make tension of Conveyor Belt on the Feeding Table loose.
Low tension of Conveyor Belt could make trouble of substrate feeding process.
Adjust the tension with tension adjustment bolt which are located at the feeding table.
Turn the bolt to the right to increase tension. Turn it to the left to decrease tension.
(Adjust the bolt with 5mm Wrench that is supplied with the laminator.)



i NOTE : Disassemble the Cover to adjust the bolt.

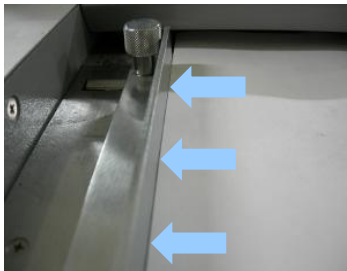
☞ Paper Guide

To avoid twist of feeding substrates. It can be adjusted for substrates' widths.
Fix the guides with Fixing Knob after the it is adjusted.
For exact feeding condition, the Paper Guide has to be aligned properly.



☞ Extra Paper Guide

For the various substrates widths, it is required to have the extra guide to avoid trouble between the paper guide and conveyor belt for substrate setting,
It has magnetics for easy adjustment of its position.





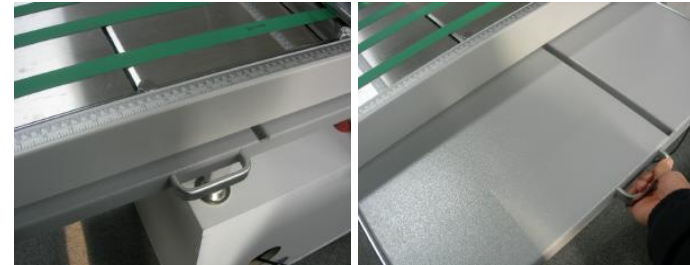
How to use Laminating Devices (DUAL)

How to use Laminating Devices

☞ Substrates Table

To place substrates for easy feeding of them.

Draw it out from the Feeding Table when it is required.



How to use Cutting Devices

☞ Adjustment of Perforator

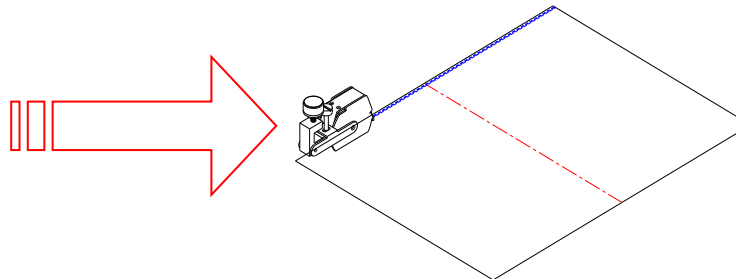
Perforator is to make holes in a row at the edge side of film to cut it easily.

Place it at the 1~3mm from the film edge.

With Height Adjustment Bolt of Perforator, set the pressure till it make holes on the laminated results.



Height Adjustment Bolt



WARNING : In case of initial loading status or if it is required to move (right / left) the perforator, release the height adjustment bolt.

Otherwise, this could be a cause of damage on the blade or roller.



How to use Laminating Devices (DUAL)

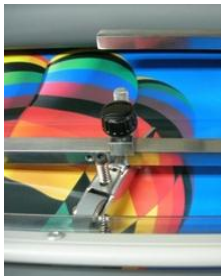
How to use Cutting Devices

☞ Skewing Wheel

To support the cutting of laminated results and it is effective to avoid the films are torn out after lamination.

Install the device to make winding laminated results to delay its exit for the better cutting quality.

Skewing Wheel Angle has to be adjusted to avoid substrate fold.

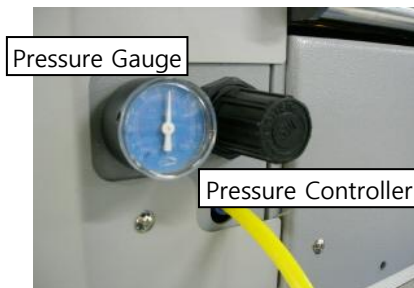


WARNING : Laminated Results could be folded if the skewing wheel is not set properly.

☞ Adjustment of Pressure for the Skewing Wheel

It is same as the way for adjustment of Pressure for Laminating Roller.

Pressure for Laminating Roller can be adjusted by Pressure Controller and its strength is displayed on the gauge.



NOTE : Pressure has to be adjusted for Laminating Films or Substrates Status.

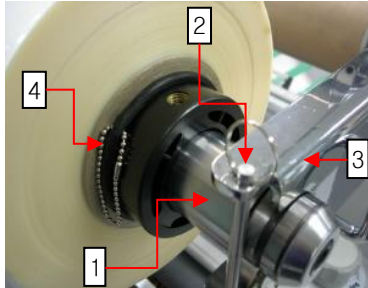
Max. Pressure is less than 0.6MPa(6kg/cm²).



How to use Laminating Devices (DUAL)

How to load / replace Films

☞ Structure for Film Shaft



1. Film Shaft : To load laminating roll film.
2. Film Shaft Holder Fixing Pin : To fix the Film Shaft Holder Position.
3. Film Shaft Holder : To avoid movement of Film Shaft.
4. Film Core : To fix laminating roll film.

☞ How to load Laminating Film

Film width has to be narrower than substrate's one by 5~10mm.

1. Remove the Film Shaft Holder Fixing Pin.
2. Open the Film Shaft Holder.
3. Load / Remove Laminating Film on the Film Shaft.
 - Pull the Fixing Ring on the Film Core out and load Laminating Film.
 - Place Laminating Film properly and tight up the Film Core Fixing Bolt. (Use 5mm Wrench that is packed with the machine.)
4. Close the Film Shaft Holder and fix it with the Film Shaft Holder Fixing Pin.



WARNING : Laminating Film is heavy, then it requires more than 2 persons for film loading. Otherwise, this could be a cause of injury.



How to use Laminating Devices (DUAL)

How to load / replace Films

☞ Setting of Laminating Film

For single side lamination, substrate width has to be wider than laminating film width by around 5~10mm.

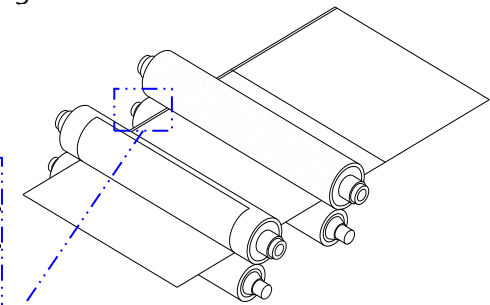
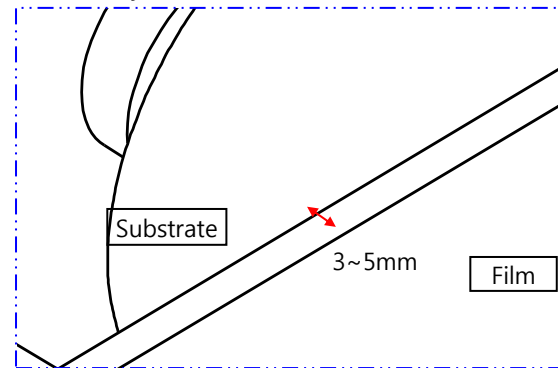
If laminating film width would be wider than substrate width, this could be a cause of contamination / damage on the roller.

Place Laminating Film inside from the edge of substrate by 3~5mm as the below picture.



WARNING : Film width has to be narrower than substrate width by around 5~10mm.

Otherwise, this could be a cause of trouble.



☞ Side Slitter & Rewinder

To slit the remnant width if Laminating Roll Film width is wider than Substrate.

As on the right picture, place the slitter in proper position and slit it.

Slitted remnant film has to be rewinded on the Rewinder.



WARNING : Sharp Blade could be a cause of injury.

Be careful to set the slitter.



Film Slitting with Side Slitter & Rewinder



How to use Laminating Devices (DUAL)

Other Devices

☞ Power Switch

Power Switch is to supply / stop the power for the Laminator.

Press "I" for Power On and Press "O" for Power Off.

The device has overcurrent circuit breaker to stop the power supply in case of overload or overcurrent is occurred in the laminator.



NOTE : If the Power Off is occurred for more than 2 times consecutively, please contact to the supplier.



NOTE : How to replace the FUSE

1> Pull the FUSE HOLDER from the area.

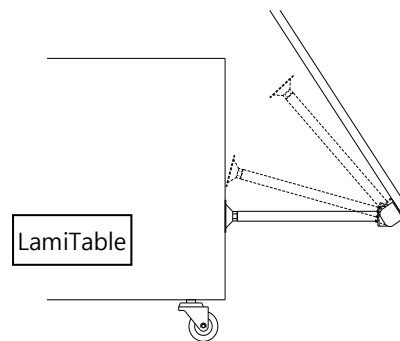
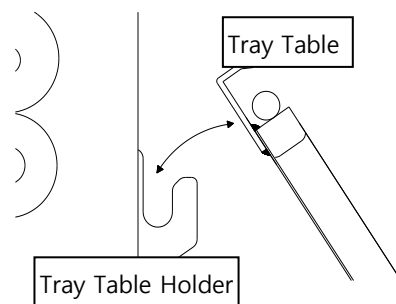
With "-" screw driver, press FUSE HOLDER gently and rotate it.

2> Remove the troubled FUSE and replace it with the Spare FUSE (is packed with the machine). (Prior to replacement, check its specification.)

☞ Tray Table

This is to arrange laminated results easily.

Guide can be adjusted for substrates width / length.





How to use Laminating Devices (DUPLEX)

Laminating Devices

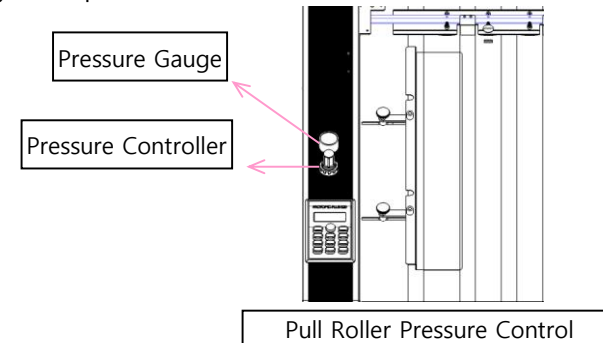
How to adjust the Pressure on Laminating Roller

Pressure on Laminating Roller & Embossing Roller can be adjusted by the Pressure Controller and its value is displayed on the gauge.

Pull the Pressure Controller to adjust the pressure strength, then after the pressure is adjusted, press it to fix.

Turn the Controller to the right to increase the pressure strength.

Turn the Controller to the left to decrease the pressure strength.



NOTE : Pressure could be adjusted by film or substrate.

The Max. Pressure is less than 0.6MPa(6kg/cm²).

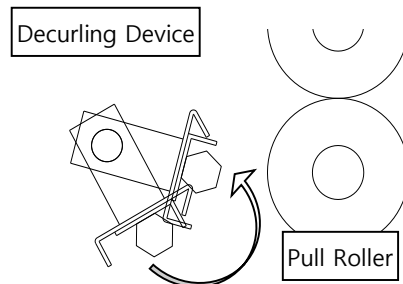
Adjustment of Decurling Value

It is natural phenomenon for single side lamination to have decurling after lamination. This is not caused by a trouble of laminator.

Decurling Device to avoid a curling after single side lamination.

The curling status on the laminated results can be adjusted by the Decurling Adjustment Handle.

Turn it to the Right to increase its decurling value. Turn it to the Left to decrease the decurling value.



Curling Status when the handle is turned to the right.

Curling Status when the handle is turned to the left.

NOTE : Adjust the Decurling Device Angle for the Substrates' Thickness & Materials.



How to use Laminating Devices (DUPLEX)

How to use Laminating Devices

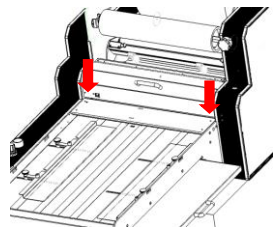
Adjustment of Pressure for Feeder

This device is the height-adjustable function for various kinds of substrates.

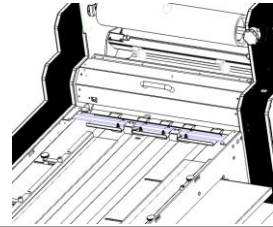
For substrates' thickness and surface status, the stop shutter height on the feeder has to be adjusted.

If it would not be adjusted, this could be a cause of trouble (twist, miss feeding) in feeding process.

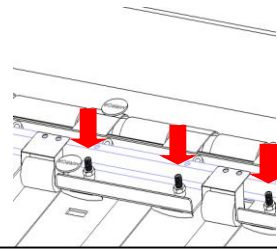
These below is to adjust the pressure.



1. Remove Cover Fixing Bolt



2. Remove Cover



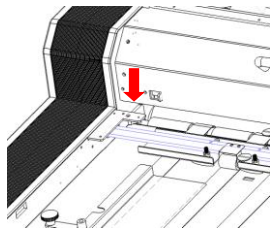
3. Adjust its height of Pressure Adjustment Bolt



NOTE : After adjustment of the Pressure, try to laminate for test of pressure status.

Feeding Indicator

This device is an indicator for feeding time (to put the substrate on the feeding table.)



"LAMP ON" : Feeder is operated. Substrates are fed for lamination.

"LAMP OFF" : Feeder is stopped. Substrates are on the feeding table.



How to use Laminating Devices (DUPLEX)

How to use Laminating Devices

☞ Tension Adjustment of Conveyor Belt

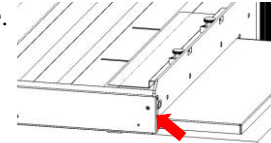
Long term lamination could make tension of Conveyor Belt on the Feeding Table loose.

Low tension of Conveyor Belt could make trouble of substrate feeding process.

Adjust the tension with tension adjustment bolt which are located at the feeding table.

Turn the bolt to the right to increase tension. Turn it to the left to decrease tension.

(Adjust the bolt with 5mm Wrench that is supplied with the laminator.)



Tension Adjustment Bolt



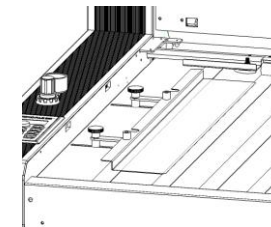
NOTE : Disassemble the Cover to adjust the bolt.

☞ Paper Guide

To avoid twist of feeding substrates. It can be adjusted for substrates' widths.

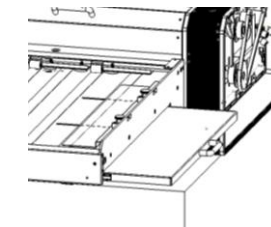
Fix the guides with Fixing Knob after the it is adjusted.

For exact feeding condition, the Paper Guide has to be aligned properly.



☞ Extra Paper Guide

For the various substrates widths, it is required to have the extra guide to avoid trouble between the paper guide and conveyor belt for substrate setting, It has magnetics for easy adjustment of its position.





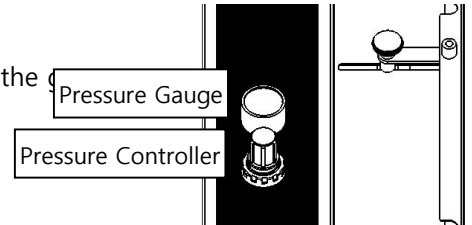
How to use Laminating Devices (DUPLEX)

How to use Laminating Devices

Adjustment of Pull Roller

It is same as the adjustment of Laminating Roller.

Laminating Roller Pressure can be adjusted by Pressure Controller and Pressure is displayed on the

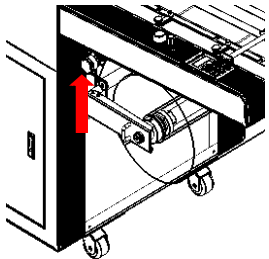


Pull Roller Pressure Control

NOTE : Pressure could be adjusted by film or substrate.

The Max. Pressure is less than 0.6MPa(6kg/cm²).

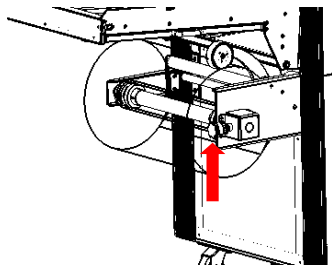
Knob for installation of bottom film



When installing the bottom of the film is a roller and the handle moves the gate.

Knob clockwise to move towards the film feed roller and roller gates will be opened between the transfer plate.

Film tension control knob



To adjust the tension of the film.

Knob clockwise to the film's tension grows, Counter-clockwise will decrease the tension.



How to use Laminating Devices (DUPLEX)

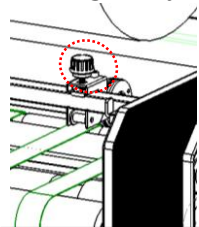
How to use Cutting Devices

Adjustment of Perforator

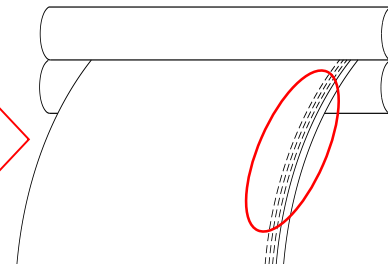
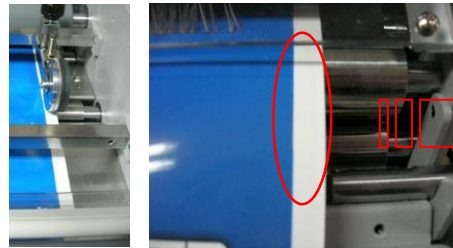
Perforator is to make holes in a row at the edge side of film to cut it easily.

Place it at the 1~3mm from the film edge.

With Height Adjustment Bolt of Perforator, set the pressure till it make holes on the laminated results.



Height Adjustment Bolt



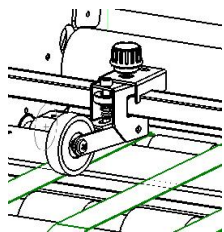
WARNING : In case of initial loading status or if it is required to move (right / left) the perforator, release the height adjustment bolt. Otherwise, this could be a cause of damage on the blade or roller.

Skewing Wheel

To support the cutting of laminated results and it is effective to avoid the films are torn out after lamination.

Install the device to make winding laminated results to delay its exit for the better cutting quality.

Skewing Wheel Angle has to be adjusted to avoid substrate fold.



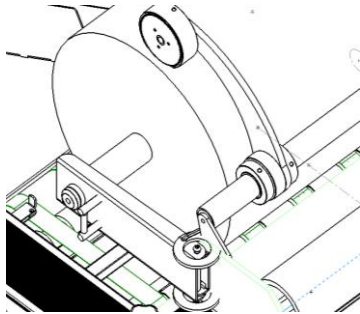
WARNING : Laminated Results could be folded if the skewing wheel is not set properly.



How to use Laminating Devices (**DUPLEX**)

How to load / replace Films

Structure for Film Shaft



1. Film Shaft : To load laminating roll film.
2. Film Shaft Holder Fixing Pin : To fix the Film Shaft Holder Position.
3. Film Shaft Holder : To avoid movement of Film Shaft.
4. Film Core : To fix laminating roll film.

How to load Laminating Film

Film width has to be narrower than substrate's one by 5~10mm.

1. Remove the Film Shaft Holder Fixing Pin.
2. Open the Film Shaft Holder.
3. Load / Remove Laminating Film on the Film Shaft.
 - Pull the Fixing Ring on the Film Core out and load Laminating Film.
 - Place Laminating Film properly and tight up the Film Core Fixing Bolt. (Use 5mm Wrench that is packed with the machine.)
4. Close the Film Shaft Holder and fix it with the Film Shaft Holder Fixing Pin.



WARNING : Laminating Film is heavy, then it requires more than 2 persons for film loading. Otherwise, this could be a cause of injury.



How to use Laminating Devices (DUPLEX)

How to load / replace Films

Setting of Laminating Film

For single side lamination, substrate width has to be wider than laminating film width by around 5~10mm.

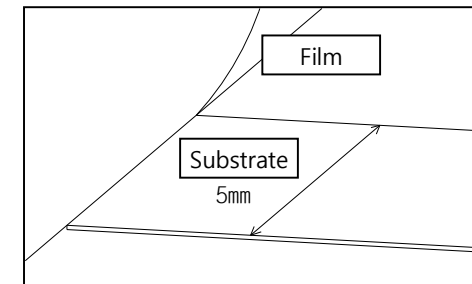
If laminating film width would be wider than substrate width, this could be a cause of contamination / damage on the roller.

Place Laminating Film inside from the edge of substrate by 3~5mm as the below picture.



WARNING : Film width has to be narrower than substrate width by around 5~10mm.

Otherwise, this could be a cause of trouble.



Side Slitter & Rewinder

To slit the remnant width if Laminating Roll Film width is wider than Substrate.

As on the right picture, place the slitter in proper position and slit it.

Slitted remnant film has to be rewinded on the Rewinder.



NOTE : This device for easy film loading, it can be moved to up/downward.

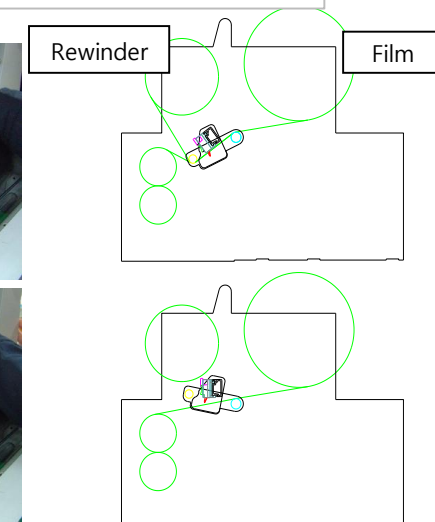


WARNING : Sharp Blade could be a cause of injury.

Be careful to set the slitter.



Film Slitting with Side Slitter &





How to use Laminating Devices (DUPLIX)

Other Devices

☞ Power Switch

Power Switch is to supply / stop the power for the Laminator.

Press "I" for Power On and Press "O" for Power Off.

The device has overcurrent circuit breaker to stop the power supply in case of overload or overcurrent is occurred in the laminator.



NOTE : If the Power Off is occurred for more than 2 times consecutively, please contact to the supplier.



NOTE : How to replace the FUSE

1> Pull the FUSE HOLDER from the area.

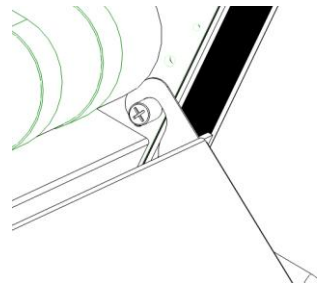
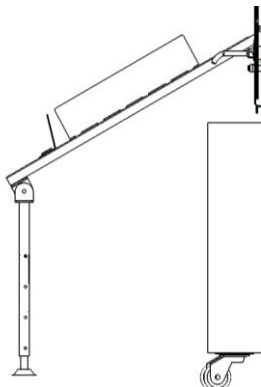
With "-" screw driver, press FUSE HOLDER gently and rotate it.

2> Remove the troubled FUSE and replace it with the Spare FUSE (is packed with the machine). (Prior to replacement, check its specificati

☞ Tray Table

This is to arrange laminated results easily.

Guide can be adjusted for substrates width / length.





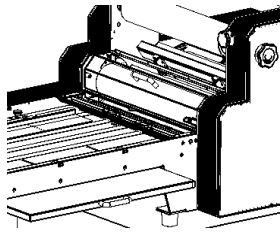
How to Laminate

Laminating Roll Film Loading for Lamination

Laminating film width has to be narrower than substrates' one by 5~10mm.

Laminating film has to be positioned inside from the substrate's edge by 5mm.

1. Remove the Roller Safety Cover.



2. Put a substrates from the laminating roller to the pull roller.



Substrate length is enough to be reached to the pull roller.

No need to use substrate for job. the important is its length.

PROTOPICII-540

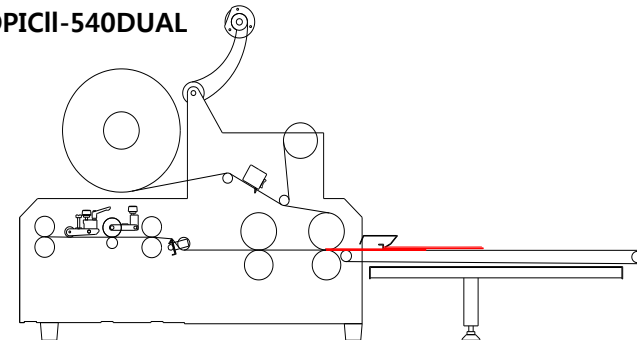


3. Pull the Laminating film to be reached to the Laminating Roller.

When the glue is melted by roller, then attach the substrate to the film.

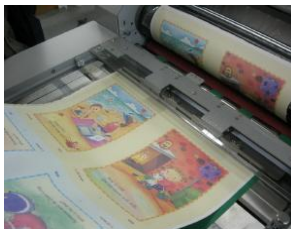


PROTOPICII-540DUAL



4. Feed substrates for job.(Roller Safety Cover has to be installed.)

Press "LOADING" button to open the Feeding Gate.



WARNING : Do not wear necktie, necklace, long-raced or that kind of clothes.

These could be wound in the driving device and will be a cause of fatal injury.



How to Laminate



NOTES

1. Stop lamination during operation could make damage / mark on laminated results.
2. Basically, the thicker substrate requires lower speed & higher temp.
3. Basically, the thinner substrate requires higher speed & lower temp.
4. If it is required for quality lamination, set the condition with the similar substrates and make working condition for the job firstly.
5. If substrate would not be fed properly, this could be a cause of wrinkle on the results.

Test Lamination

If Roller Temp. is reached to the Setting Temp., test lamination is required to check the setting condition & lamination status.

Press "RUN" button to engage the roller and lamination is started.

Checking Points for Test Lamination

1. Distance of Overlap for Substrates : 3~5mm ideally
2. Decurling Status : check the curling status of the paper and adjust it with Decurling Controller.
3. Laminating Status : Check it with various Pressure, Temp. conditions.
4. Cutting : Check the Bursting Roller Operation Time & Perforator status.

DIGITAL SLEEKING SOLUTION - Introduction

DIGITAL SLEEKING SOLUTION

GMP DIGITAL SLEEKING SOLUTION is the epoch solution to provide various value-added products with Whole Page & Spot Gloss/Matt/Hologramming with GMP Laminators.

1. SLEEKING (GLOSS & MATT FINISH)

SLEEKING FOIL : GLOSS SLEEKING FOIL, MATT SLEEKING FOIL

2.HOLOGRAM

HOLOGRAM SLEEKING FILM

- ① SPARKLE-HOLOGRAM ② HIPER PLAID-HOLOGRAM ③ CRYSTAL-HOLOGRAM ④ MILKY WAY-HOLOGRAM
- ⑤ STAR-HOLOGRAM ⑥ SPECTRUM-HOLOGRAM

3. METALLIC SLEEKING FOIL

- ① GOLD ② SILVER ③ METAL-BLUE ④ METAL-GREEN ⑤ METAL-RED

4.IMAGE TRANSFER

Transfer any kind of image can be transferred to any surface with GMP Transer Media & GMP Laminators.

GMP SLEEKING (GLOSS & MATT FINISH)

1. GLOSS/MATT SLEEKING

With GMP GLOSS SLEEKING FOIL & MATT SLEEKING FOIL, the surface of Toner Based Prints / Digital Prints can be changed for higher quality of results.

Conditions for GLOSS/MATT SLEEKING FOILS

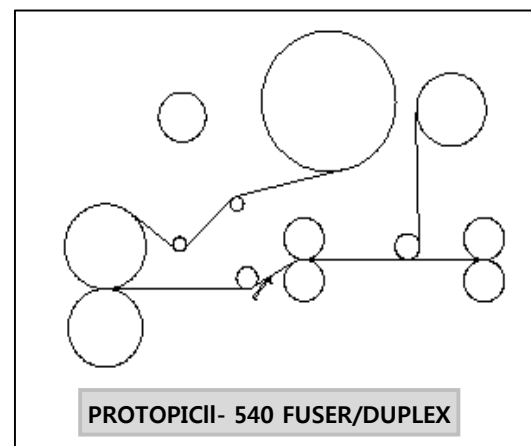
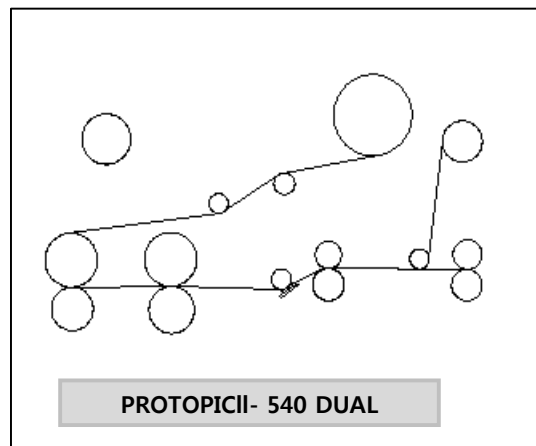
Model	Speed	Set Temp.(°C)	Pressure (MPa)
PROTOPIC II Series	3	110	0.5

(Table 1.1)



(Picture 1.1)

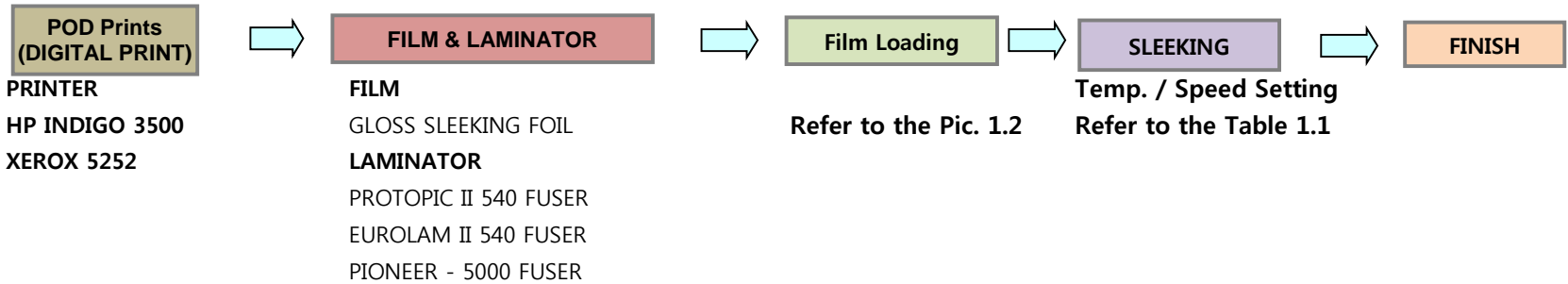
How to load the Foils



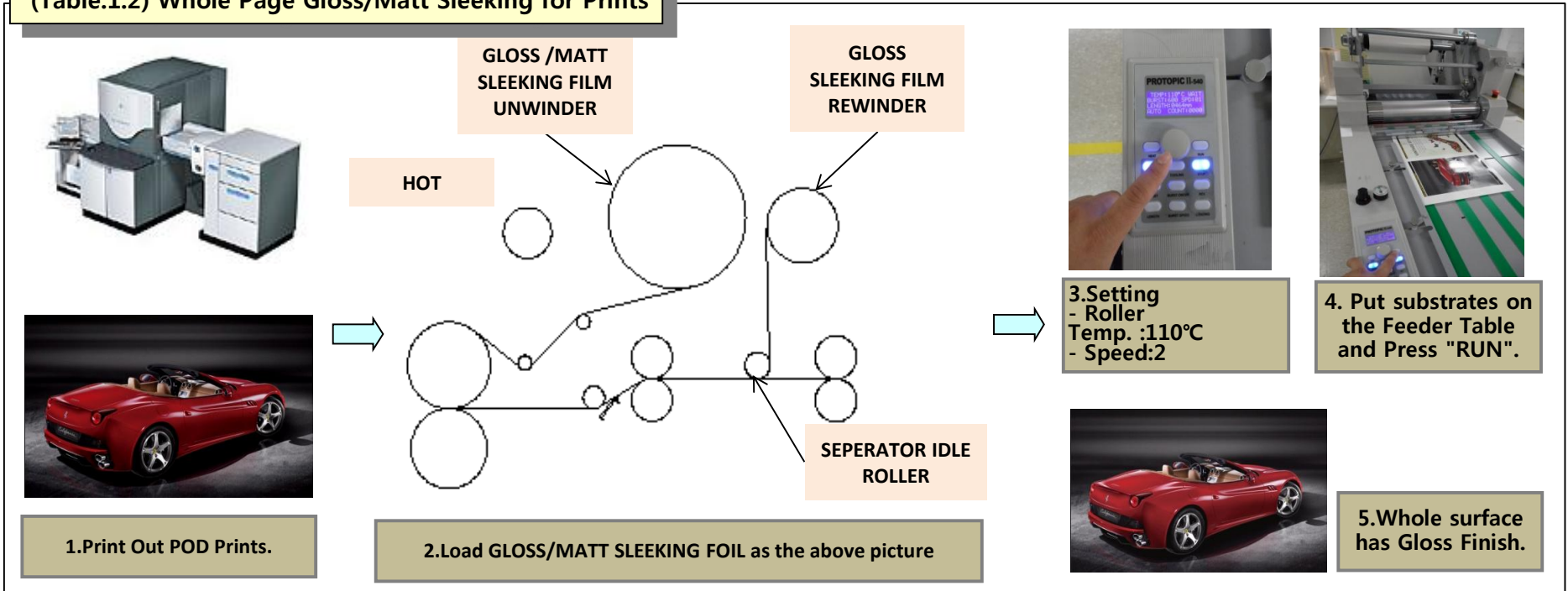
(Picture 1.2)

2. Whole Page Gloss / Matt SLEEKING SOLUTION

① Whole Page Gloss / Matt Sleeking

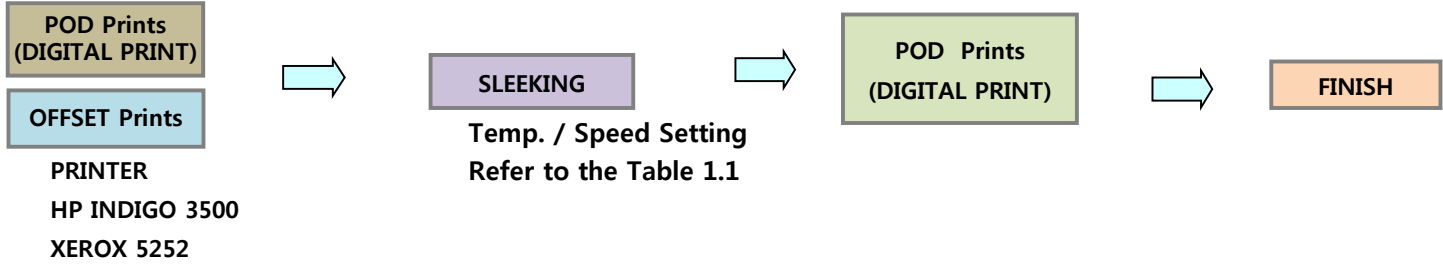


(Table.1.2) Whole Page Gloss/Matt Sleeking for Prints

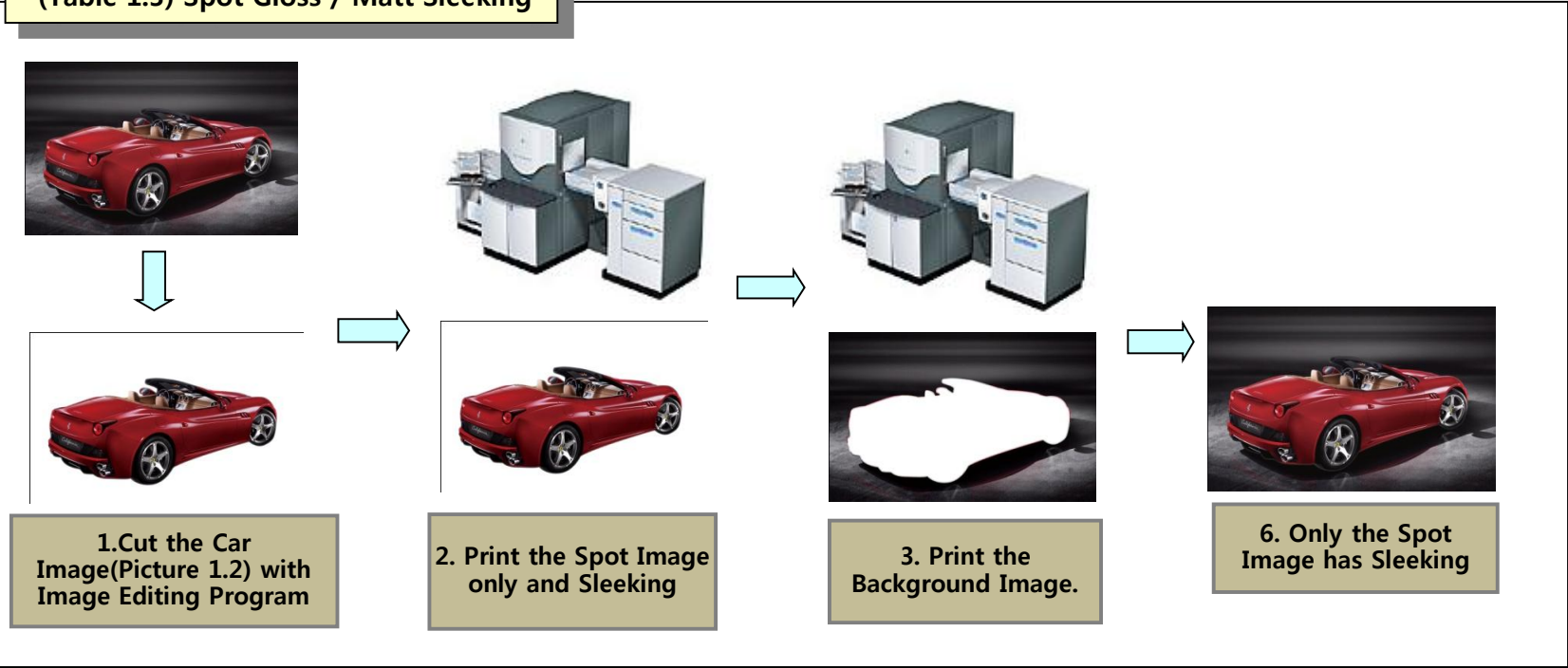


2. Spot Gloss/Matt SLEEKING SOLUTION with Prints

② Spot Gloss / Matt Sleeking



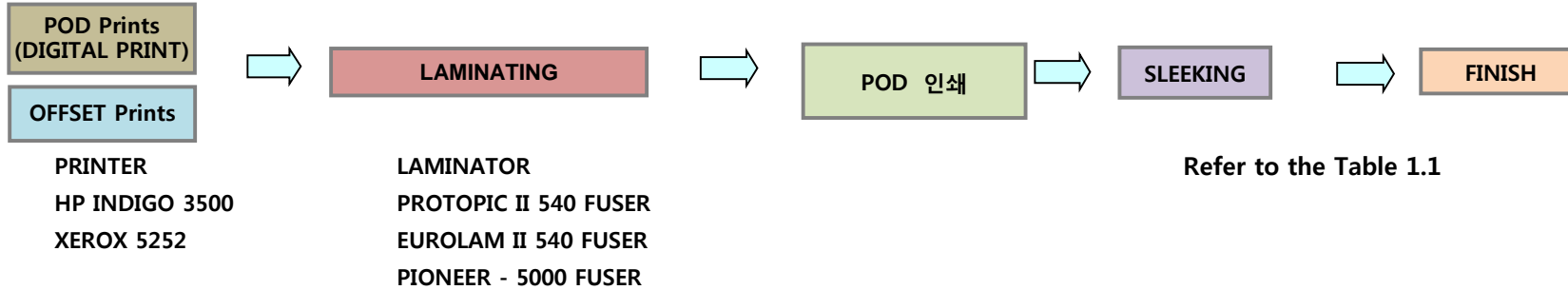
(Table 1.3) Spot Gloss / Matt Sleeking



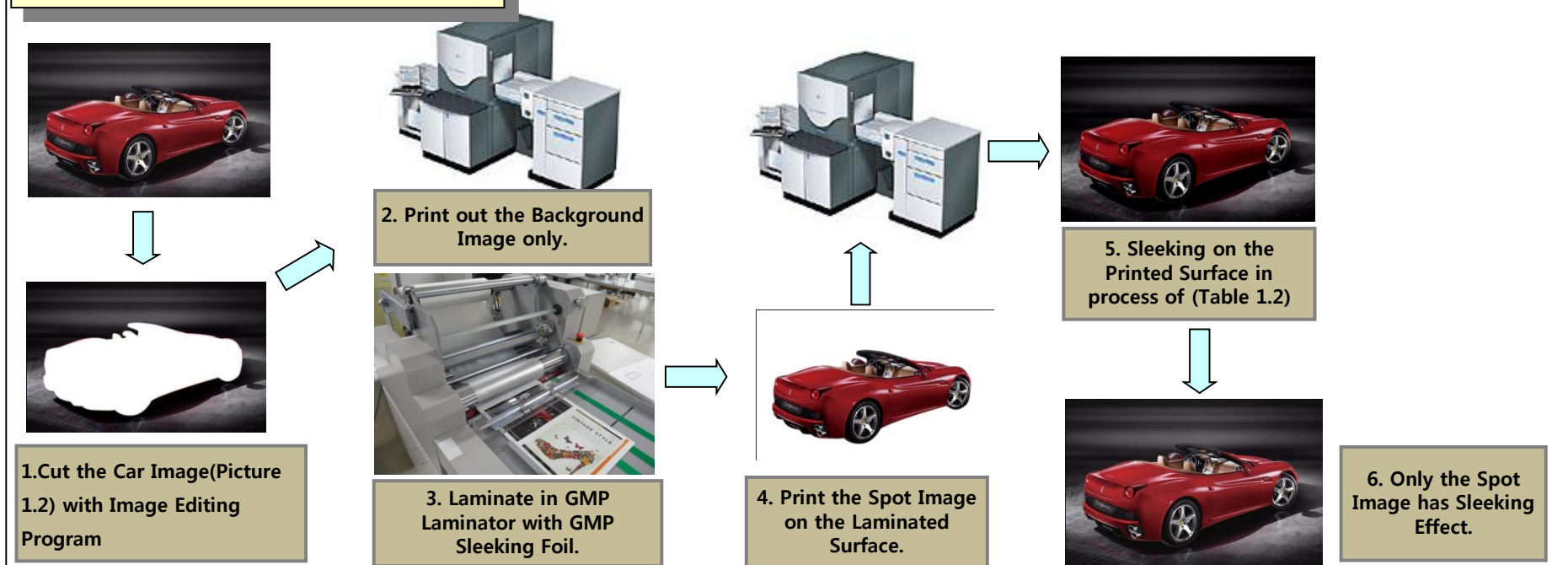
GMP SLEEKING (GLOSS & MATT FINISH)

3. Spot Gloss / Matt SLEEKING SOLUTION with Lamination

② Spot Gloss / Matt Sleeking



(Table 1.3) Spot Gloss / Matt Sleeking



1.HOLOGRAM SLEEKING

지엠피 홀로그래밍 SLEEKING FILM 을 사용하면 토너 베이스 디지털 프린터로 출력된 출력물을 홀로그램 필름으로 SLEEKING 하여 고품위의 결과물(출력물)을 얻을 수 있습니다.

Conditions for HOLOGRAM SLEEKING FOIL

Model	Speed	Set Temp.(°C)	Pressure (MPa)
PROTOPIC II Series	3	105	0.5

(Table 2.1)

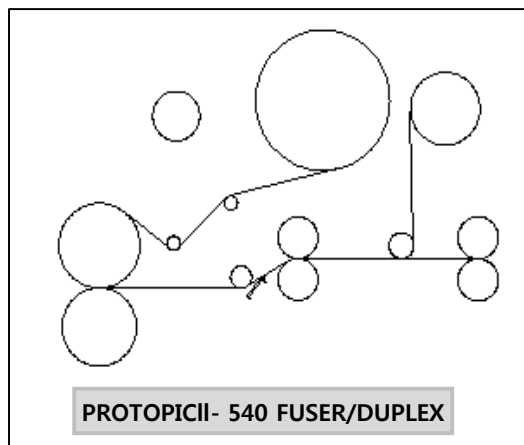
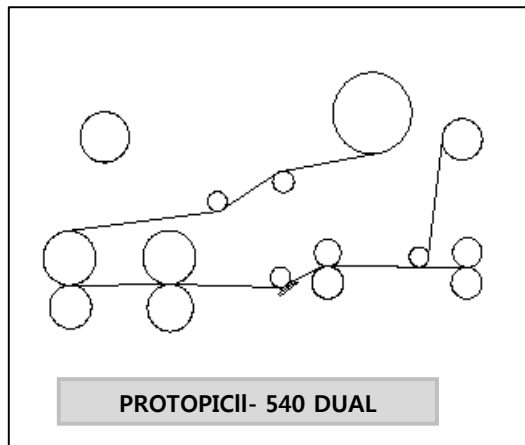
HOLOGRAM SLEEKING FOILS

- ① SPARKLE-HOLOGRAM
- ② HIPER PLAID-HOLOGRAM
- ③ CRYSTAL-HOLOGRAM
- ④ MILKY WAY-HOLOGRAM
- ⑤ STAR-HOLOGRAM
- ⑥ SPECTRUM-HOLOGRAM
- ⑦ MOSAIC-HOLOGRAM



(Picture 2.1)

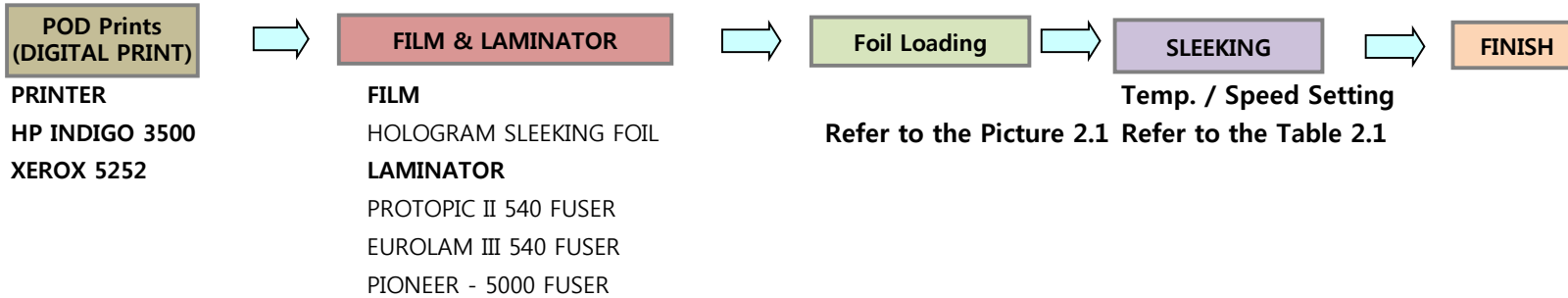
How to load the Foils



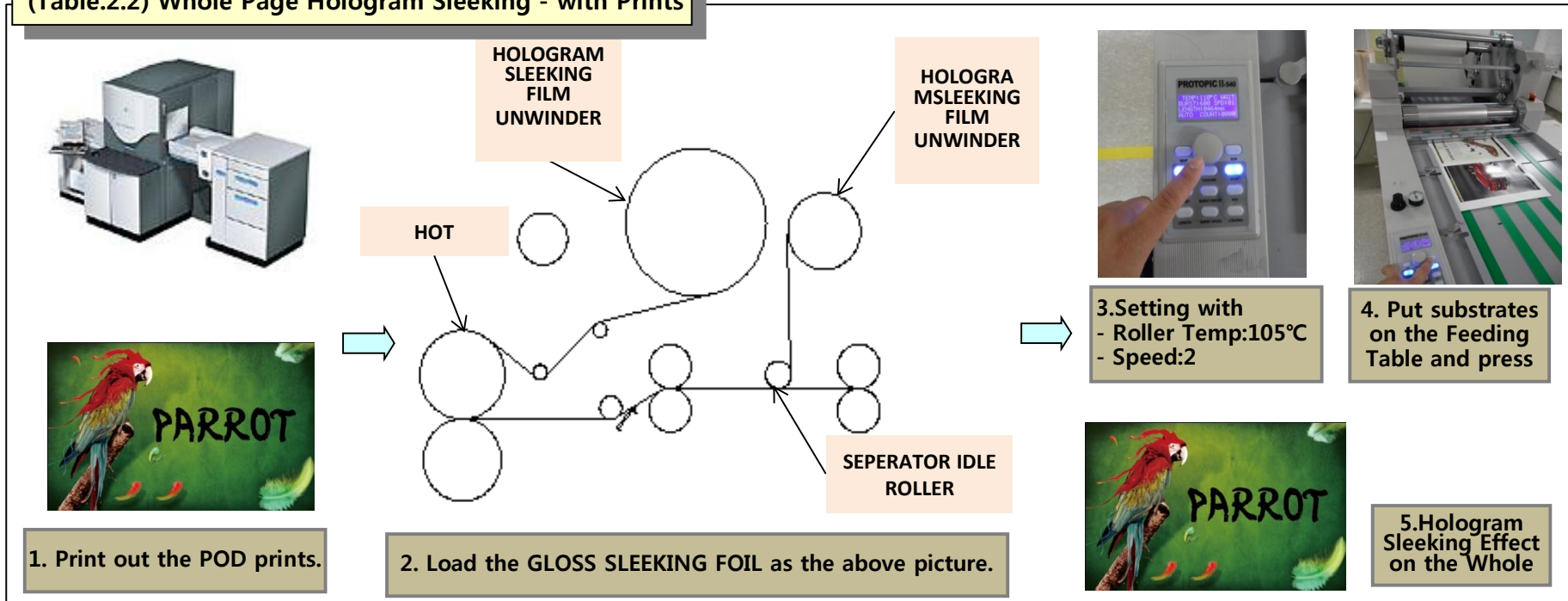
(Picture 2.2)

2. Whole Page HOLOGRAM SLEEKING SOLUTION

① Whole Page Hologram Sleeking

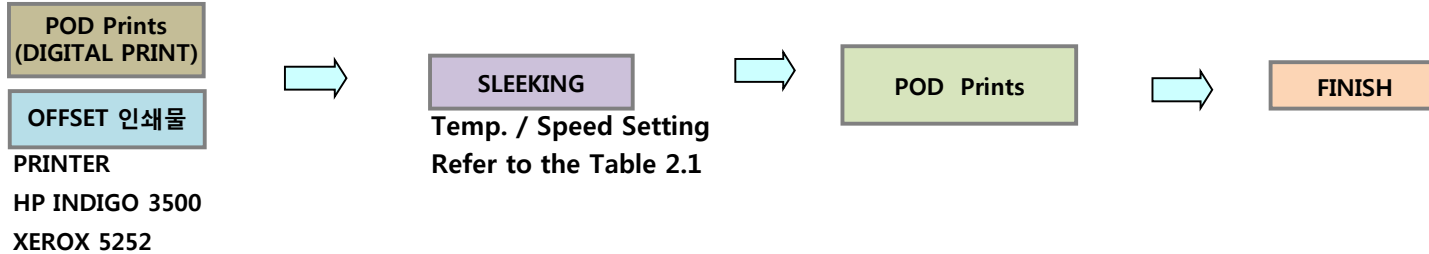


(Table.2.2) Whole Hologram Sleeking - with Prints

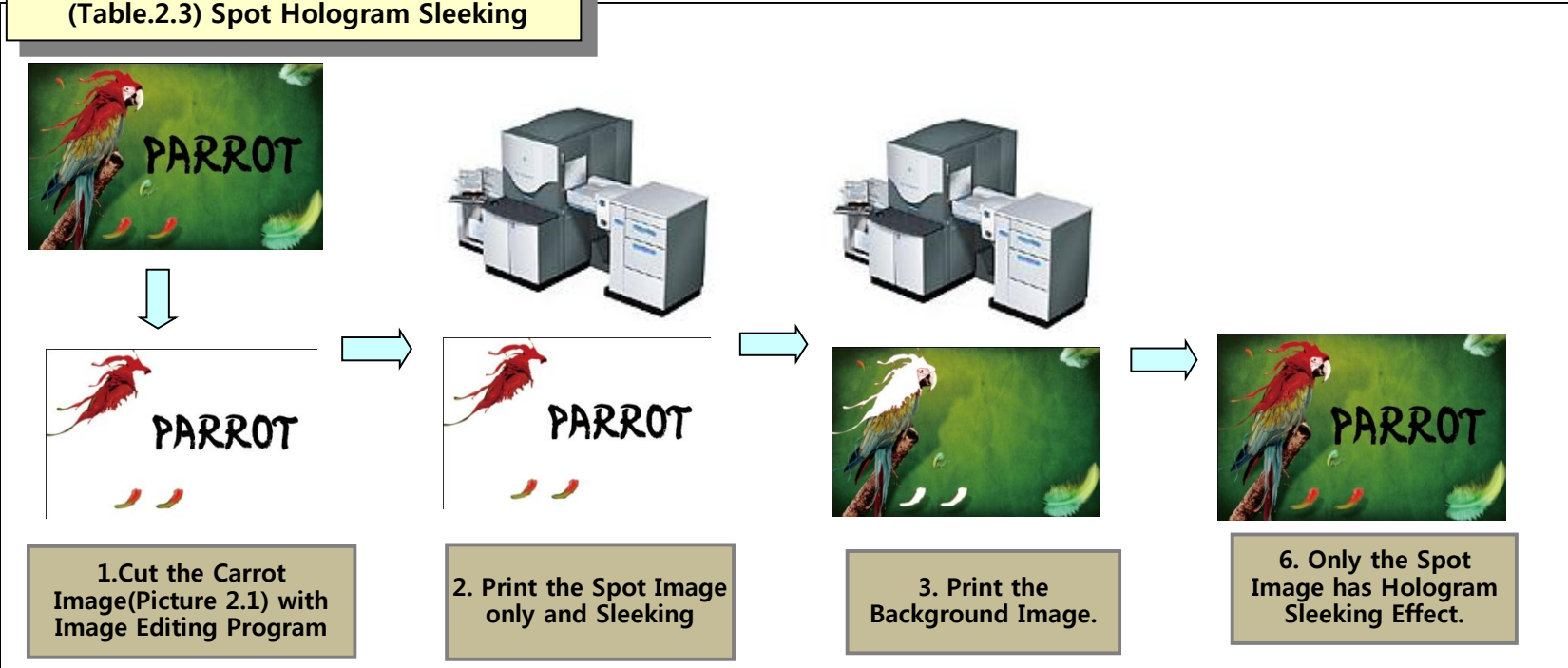


2. Spot HOLOGRAM SLEEKING SOLUTION

② Spot Hologram Sleeking

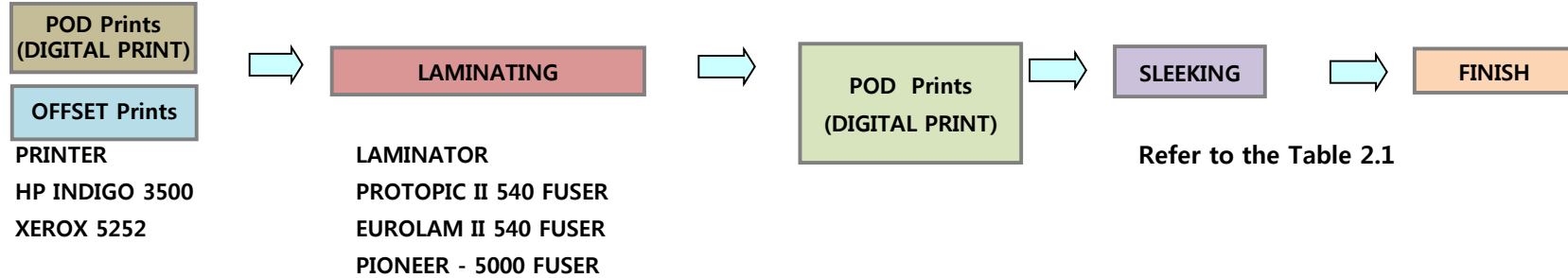


(Table.2.3) Spot Hologram Sleeking

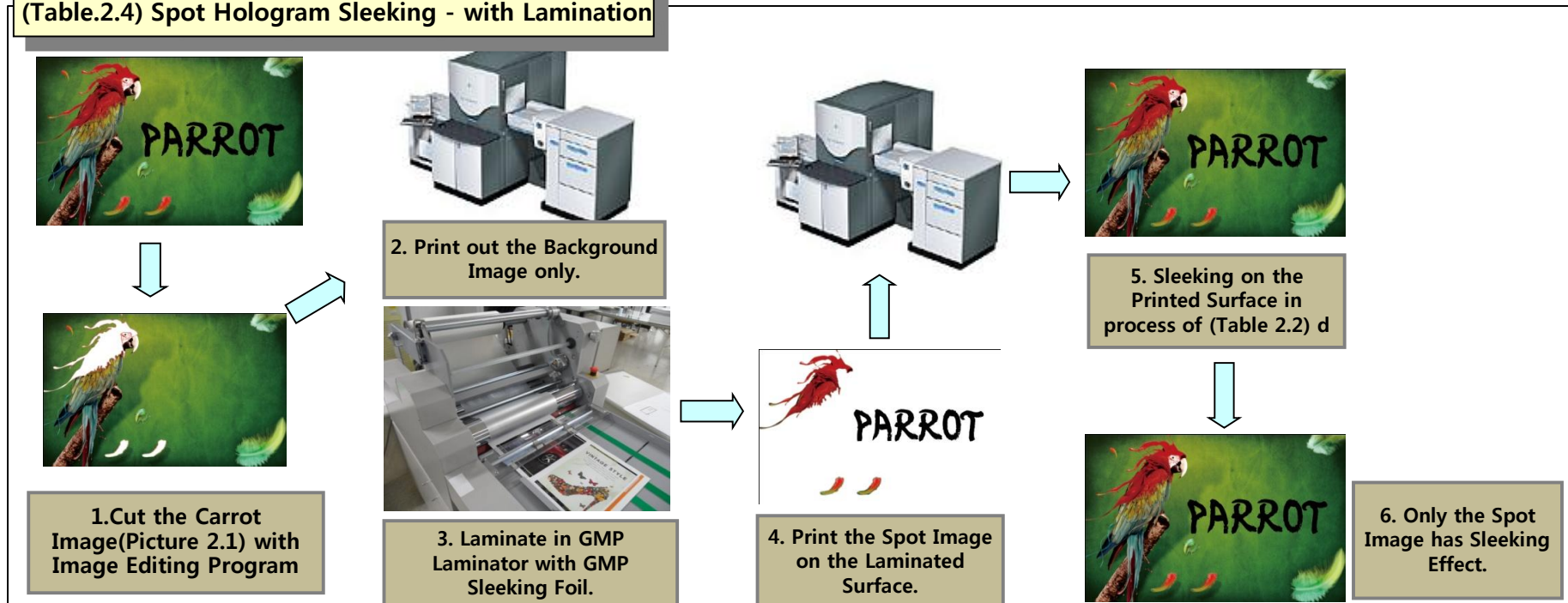


3.Spot HOLOGRAM SLEEKING SOLUTION - with Lamination

③ Spot Hologram Sleeking



(Table.2.4) Spot Hologram Sleeking - with Lamination



1.SPOT METALLIC SLEEKING

GMP METALLIC SLEEKING FOIL makes different effect on the printed area for highlight.

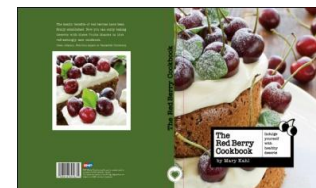
Conditions for METALLIC SLEEKING FOIL

Model	Speed	Set Temp.(°C)	Pressure (MPa)
PROTOPIC II Series	3	110	0.5

(Table 3.1)

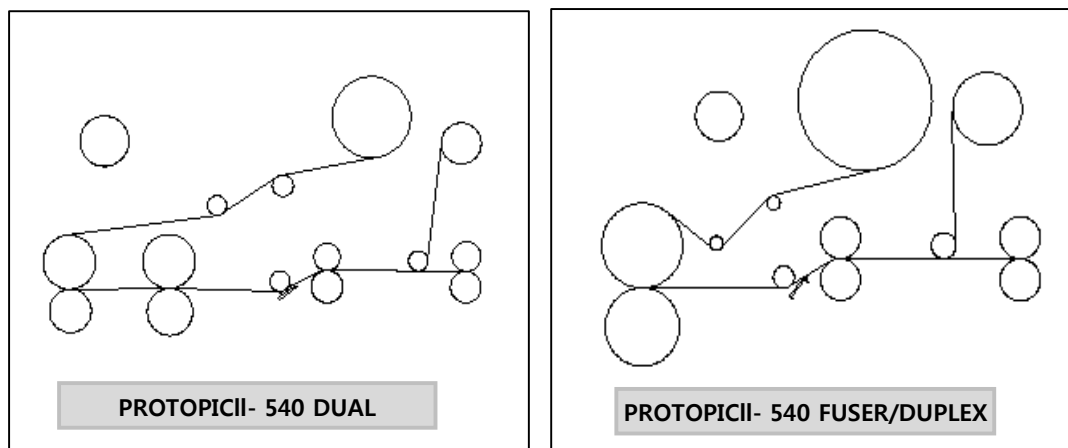
METALLIC SLEEKING FOIL

- ① GOLD
- ② SILVER



(Picture 3.1)

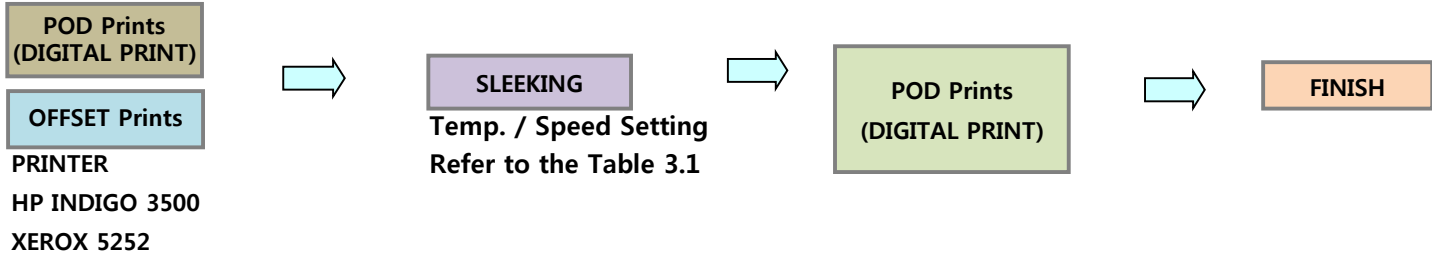
How to load the Foils



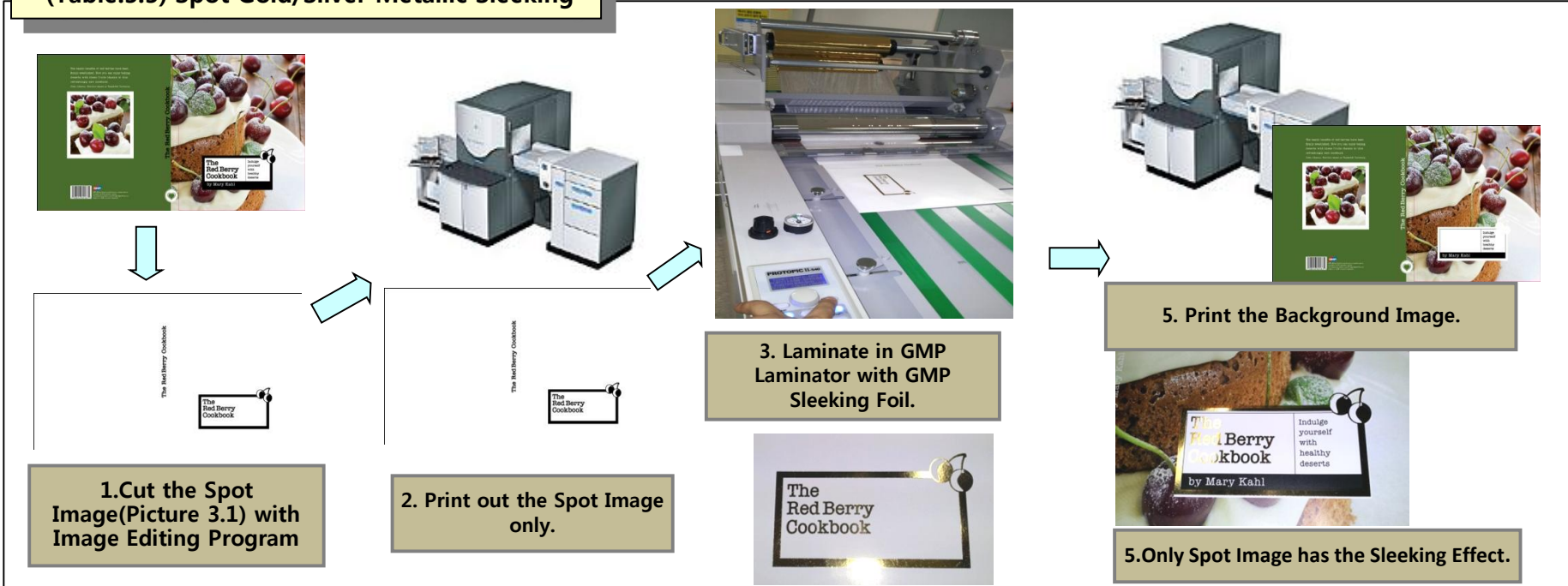
(Picture 3.2)

2. Spot METALLIC SLEEKING

① Spot Gold/Silver Metallic Sleeking



(Table.3.3) Spot Gold/Silver Metallic Sleeking





Trouble Shooting

Feeding

Trouble Type	Reason	How to solve
Laminating Roller does not work.	<ol style="list-style-type: none">1. Safety Switch on the Laminating roller cover is open.2. Laminating roller motor is broken OR Timing belt is damaged.3. Fuse disconnection	<ol style="list-style-type: none">1. Close laminating roller cover safety switch.2. Contact our dealer or A/S center.3. Exchange the enclosed 250V/8A type fuse.
Feeding interval is irregular	<ol style="list-style-type: none">1. Paper length setting is wrong.2. Irregular paper size.	<ol style="list-style-type: none">1. Using "LENGTH" button on control panel, set the right paper length Explanation on the function button, refer to the function button "LENGTH"2. Use the standard size paper
No feeding	<ol style="list-style-type: none">1. The edge of paper conflict with the feeder2. Paper is conveyed on only just two lines	<ol style="list-style-type: none">1. Spread the paper rightly and laminate2. Necessarily check the paper is conveyed with more than 3 lines.
Feeding paper array is not good.	<ol style="list-style-type: none">1. Paper loading is not good on the feeding table.2. Conveyer belt tension is not good3. Paper guide status is not right	<ol style="list-style-type: none">1. Use paper guide2. Adjust the tension using conveyer belt tension control bolt. Refer to the laminating part "Conveyer belt tension control"
During operating, a sudden stop	<ol style="list-style-type: none">1. Emergency switch is pressed2. By the feeding errors, front/rear paper feeding interval is larger, system stops	<ol style="list-style-type: none">1. Unlock the emergency switch Refer to other device "Emergency Switch"2. Using "LOADING" button, feed the new paper Refer to each button "LOADING"



Trouble Shooting

Laminating

Trouble Type	Reason	How to solve
Laminating is not good (Silvering)	<ol style="list-style-type: none"> 1. When the printing color is black 2. Laminating roller pressure is not good 3. Laminating temperature is low 4. Laminating speed is higher in not appropriate to temperature 	<ol style="list-style-type: none"> 2. Using pressure controller, increase the pressure Refer to Laminating "Roller Pressure control" 3. Increase the roller temperature Decrease the roller rotating speed 4. Decrease roller rotating speed Increase the roller temperature
Paper folding	<ol style="list-style-type: none"> 1. When the paper has more humidity compared with standard or laminating using just printed materials. 2. Laminating rubber roller is broken 3. Laminating roller pressure is irregular 4. Paper width is 30mm larger than film width 	<ol style="list-style-type: none"> 1. Use the dried paper sufficiently 2. Exchange the rubber roller Contact dealer or A/S Center 3. Contact dealer or A/S Center 4. load the paper edge 3~5mm inside the film
Laminating results' curling	<ol style="list-style-type: none"> 1. "Decurling" Value is lower 2. Paper thickness is thin 	<ol style="list-style-type: none"> 1. Refer to laminating part "Decurling Control" 2. Not use the paper below (80~120g/m²)
Film sticks to the rubber roller	<ol style="list-style-type: none"> 1. Laminating start or Paper condition change, when feeding error Film is wound into rollers. 	<ol style="list-style-type: none"> 1. Insert the test paper when film loading
Crease on the laminating results	<ol style="list-style-type: none"> 1. Thin paper laminating 2. It happens sometimes according to the paper line 3. It happens sometimes mainly due to the humidity 4. when the temperature is high 	<ol style="list-style-type: none"> 1. Not use the paper below.(80~120g/m²) 3. Use the sufficient dried paper 4. Decrease the roller temperature



Trouble Shooting

Perforating

Trouble Type	Reason	How to solve
Cutting roller does not work	<ol style="list-style-type: none">Cutting roller motor's disorder or Conveyer belt is brokenFUSE is disconnectedCompressor's malfunction	<ol style="list-style-type: none">Contact dealer or A/S CenterExchange the attached 250V/8A fuseContact dealer or A/S Center
Laminating results' cutting Status is not good	<ol style="list-style-type: none">Cutting edge of perforator is not sharpCutting roller pressure is not goodCutting timing is not regularWhen not using POLYNEX(OPP) film Cutting is not goodIn case of using NYLONEX(NYLON), PERFEX(PET)	<ol style="list-style-type: none">Adjust the cutting edge using height control bolt Refer to the Perforator "Perforator Control"Adjust the height of rollers using Cutting roller height control Knob Refer to the "Cutting roller height control Knob"Timing resetting using "DISTANCE" button on control panel Functional Adjustment refer to "DISTANCE" partContact dealer or A/S CenterUsing "BURST SPEED" button on control panel, rotate the cutting roller at high speed. Refer to the functional Part "BURST SPEED"



Trouble Shooting

Others

Trouble Type	Reason	How to solve
Cutting status is not good when using Rewinder	<ol style="list-style-type: none">1. Rewinder tension is strong2. Rewinder tension is weak	<ol style="list-style-type: none">1. Turn left the rewinder tension control knob Tension decreases2. Turn right the rewinder tension control knob Tension increases
Roller is not heated not increase above a certain temp.	<ol style="list-style-type: none">1. Temperature sensor's malfunction2. Odds between the temp. sensor and laminating roller3. Heater's disorder4. THERMOSTAT is working	<ol style="list-style-type: none">1. Contact dealer or A/S Center2. Remove odds3. Contact dealer or A/S Center4. Try again after cooling sufficiently if same problems happens, contact dealer or A/S Center
Compressor is not working smoothly		<ol style="list-style-type: none">1. Check the compressor or pressure gauge
Power is not "ON"	<ol style="list-style-type: none">1. Check the Power switch is "OFF"2. FUSE Disconnection3. PCB BOX is open	<ol style="list-style-type: none">2. Exchange the attached 250V/8A fuse3. Close "PCB BOX"

Roller Cleansing

※ **If the roller is not cleaned regularly,**

- Film can be wound into the rollers.
- It contaminates the laminating results.

※ **Roller Cleansing**

- After laminating is finished, when the laminating roller temperature is below 80 °C , sweep the roller with "cotton" rag and "isoprophile alcohol".



Caution : When cleansing the roller, use "isoprophilene alcohol" only.

Main body cleansing

※ **Main Body Cleansing**

- Main body and cover should be cleansed with soft linen.



Caution : Segregate the power plug from the outlet. It can be a reason of fireflame.

Caution : Using flammable chemicals such as Acetone or Benzene can be a reason of fireflame.

ITEMS	PROTOPICII-540/FUSER	PROTOPICII-540DUAL	PROTOPICII-540DUPLEX
Dimension (W*L*H)(mm)	800*1580*670	800*1770*670	800*1580*670
Weight(kg)	170	185	250
Max. Laminating Speed (m/min)	15	15	15
Max. Paper Size (mm)	540*800	540*800	540*800
Min. Paper Size (mm)	210*200	210*200	210*200
Paper Thickness (g/m ²)	120~350	120~350	120~350
Laminating Films	POLYNEX,PERFEX,NYLONEX FILM (20~44 μ m)	POLYNEX,PERFEX,NYLONEX FILM (20~44 μ m)	POLYNEX,PERFEX,NYLONEX FILM (20~44 μ m)
Power Requirement	AC 220~240V/12A	AC 220~240V/12A	AC 220~240V/12A
Power Consumption	2.8 kw	3.45 kW	5.6 kw
Warm-Up Time	7 mins.	7 mins.	7분
Heating System	INFRARED HEATER	INFRARED HEATER	INFRARED HEATER
Roller Temperature (°C)	MAX.150	MAX.150	MAX. 150
Temperature Control	Time Proportional Control	Time Proportional Control	Time Proportional Control
Motor for Lamination	DC MOTOR	DC MOTOR	DC MOTOR
Motor for Bursting	DC MOTOR	DC MOTOR	DC MOTOR
Roller Pressure	Air Cylinder	Air Cylinder	Air Cylinder
Film Shaft	3" Shaft	3" Shaft	3" Shaft
Cooling System	BLOWER	BLOWER	BLOWER
Cutting System	BURST CUTTING WITH PERFORATOR	BURST CUTTING WITH PERFORATOR	BURST CUTTING WITH PERFORATOR

※ External Design & Specification could be changed for improvement without extra notice.



Film Specification

SLEEKING FILM

MEATALLIC FOIL (GOLD,SILVER)	
SINGLE COLOR FOIL	3000M
MULTI COLOR FOIL	3000M
HOLOGRAM FOIL	3000M

SLEEKING FOIL	
GLOSS	77CORE * 1000M,2000M
MATT	77CORE * 1000M,2000M
DUAL	77CORE * 1000M,2000M

HOLOGRAM SLEEKING FOIL - SPECTRUM,MILKYWAY,CRYSTAL,STAR,MOSAIC,SPARKLE,HYPER PLAID	
HOLOGRAM SLEEKING FOIL-PET12	77CORE * 1000M
HOLOGRAM SLEEKING FOIL-PET25	77CORE * 1000M
HOLOGRAM SLEEKING FOIL-PET50	77CORE * 1000M
HOLOGRAM FOIL-UV20	77CORE * 1000M
HOLOGRAM FOIL-UV30	77CORE * 1000M