

## Laminating machine

**EASYLAM**  
**160 TW**

## Instruction manual



- Item no.: 26219 including MediaTrim
- Item no.: 26218 without MediaTrim

**Read the operating instructions carefully before use  
and keep it for further use.**

## Technical notes

|                               |                    |
|-------------------------------|--------------------|
| model .....                   | EASYLAM 160TW      |
| length .....                  | 206 cm             |
| width .....                   | 65 cm              |
| height .....                  | 148 cm             |
| work surface height .....     | 104 cm             |
| max. material width .....     | 169 cm             |
| effective roller length ..... | 1640 mm            |
| max. roller gap .....         | 30 mm              |
| power supply .....            | 110 - 230 V        |
| .....                         | 50/60 Hz max. 11 A |

## Installation

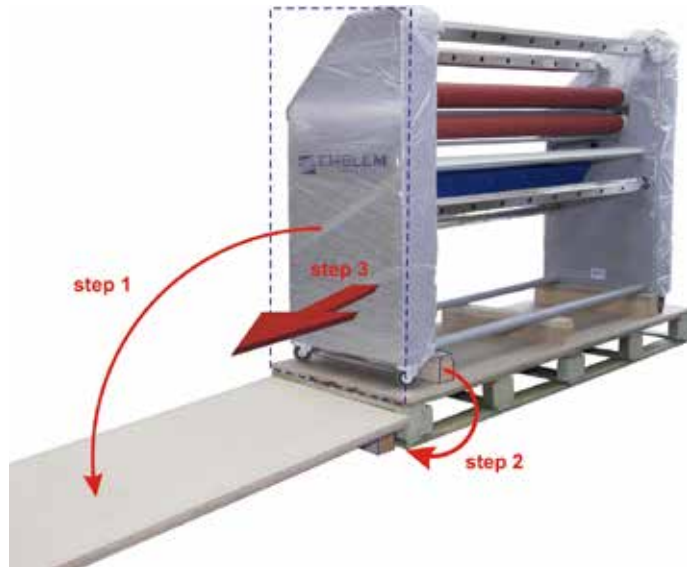
The machine is delivered in a wooden crate.

dimensions ..... 216 x 162 x 72 cm

total weight incl. wooden packaging kg ..... 410 kg

For unpacking, the use of a cordless screwdriver is recommended. You will also need a 17 mm spanner.





## Further notes on installation:

### Power supply

The power supply specified here should be available in the vicinity of the site:

- alternating voltage: 110 or 230V. The power supply unit switches automatically.
- frequency: 50 - 60 Hz
- current strength: 16 A

### Power connection

Check that the power connection corresponds to the machine power.  
Before each connection to the mains, the earthing must be secured.  
Connect the machine to the mains:

- Disconnect the power supply.
- Connect the connection cable to a suitable plug or directly to the power distribution.
- Switch the power back on.



### Space requirement

The footprint must meet the space requirements for the scheduled use of the machine.  
Also take into account the space required for feeding or dispensing the material and the dimensions of the images and plates to be processed.

### Floor space

Prepare a level floor according to the dimensions of the machine, taking into account the accessory equipment.

### Lighting

Good lighting (indicative 300 - 600 lux) is essential for safe machine operation and maintenance.

### Room characteristics

The machine must be installed in a closed room and protected from the weather.

Permissible room temperature: 18°C to 35°C.

Corresponding permissible humidity range: 30% to 80%.

### Foot pedal

Connect the foot pedal by plugging the plug into the socket marked on the bottom right.

## Laminator from front



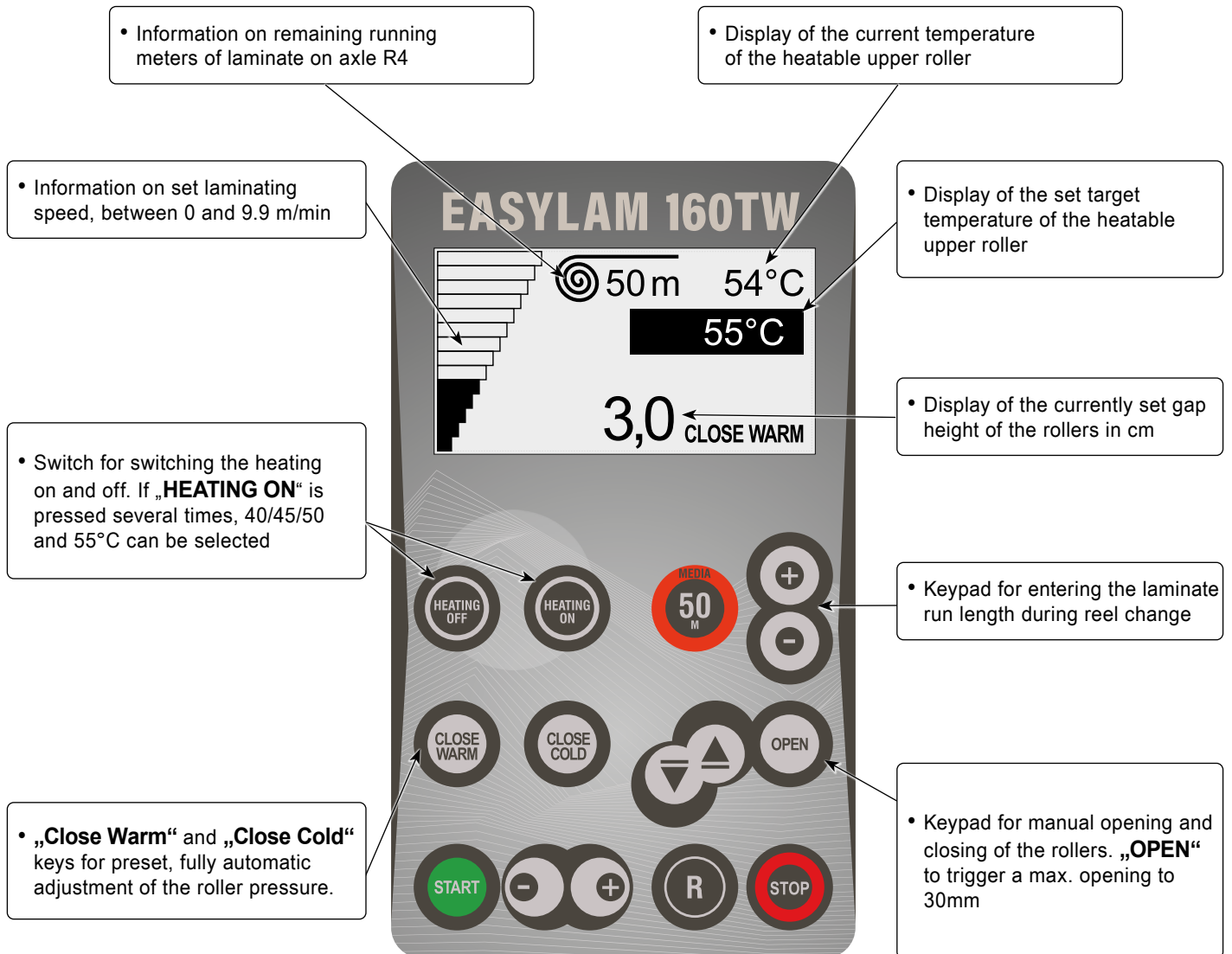
## Laminator from back

## Laminator from back



## The keyboard with LED display

The machine is controlled by the foot pedal and the following keyboard:



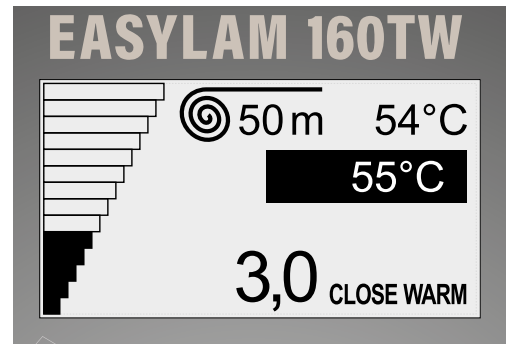
- **START/STOP** - Starts or stops the rollers. Alternatively you can step on the pedal and thus start or stop.
- **SPEED** „-“ and „+“ changes the laminating speed
- **REVERSE** - The machine stops and runs slowly in the opposite direction

- „Close Warm“ is used to close the rollers when the upper roller is heated.
- „Close Cold“ is used to close the rollers when the roller is cold and not heated.



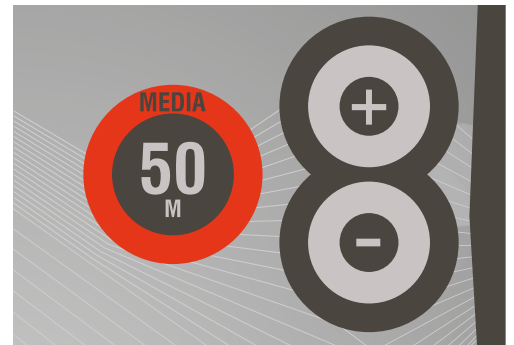
## Use of the upper heated Roller

The upper silicone roller can be heated up to 55°C with an integrated heater. Press „**HEATING ON**“ once or several times and the display will show the current temperature and the set target temperature. You can set 40, 45, 50 and 55°C.



## Enter the remaining running length of the inserted laminate

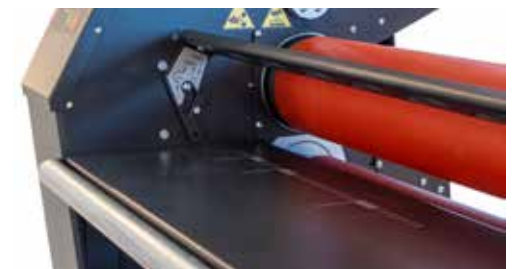
EASYLAM 160TW has a counting function that measures the consumption of the inserted laminate and displays the remaining length of the run on the roll. After inserting a full roll, press the **Media 50m** button. If you re-insert an already used roll of laminate - e.g. because you change from „matt“ to „glossy“ - the remaining length can be set precisely with the + or - buttons.



## Finger protection

The mechanical finger protection prevents the user of the laminator from accidentally getting his fingers caught between the laminating rollers. The finger protection is adjustable in 3 positions:

1. for laminating thin material like paper or film
2. for laminating panels up to a thickness of 30mm
3. for convenient insertion of the laminate with the rollers open



## Rear foot switch

For comfortable insertion of the laminate, you can use the foot switch when standing on the back of the laminator and tensioning the material with both hands. The switch has the same function as the „**CLOSE WARM**“ button on the display.



## Safety devices

The machine is equipped with the following safety devices:

- right cover housing
- left cover housing
- finger protection bar
- emergency stop switch left
- right hand circuit breaker

When operating the machine, make sure that your hands do not come between the rollers. The EMBLEM EASYLAM 160TW is equipped with a finger protection. This is to prevent that parts of the body or foreign objects get between the rollers. The manufacturer does not take any responsibility if the operator of the machine has made any structural or electrical modifications to these protective devices. The side panels, which protect the electrical equipment, may only be removed by qualified personnel or by personnel authorised by the manufacturer.

## Operating the machine

The operator stands in front of the machine when work starts. The machine is switched on via the main switch (inside right below). The switch lights up green. Above the keypad with LED display you will find another switch for switching the machine on and off.

### General information

The material axles (R1 - R4) are equipped with adjustable brakes and slip clutches. Each material has its own characteristics, which may vary depending on temperature, humidity, adhesive used, type of film, etc. The ideal working condition is one in which the material is tensioned on the top roller and guided and applied without wrinkles with minimal braking. The search for this „ideal setting“ starts by looking for the point where the braking unit only works lightly, and then gradually increases in strength as required. Care must be taken not to stretch the film too much to prevent it from being stretched initially and then distorting the laminated product. If the protective liner has to be rolled up, it is sufficient to apply a slight tension. Therefore, make sure that the roll-up clutch is carefully adjusted.



The machine may only be operated by qualified personnel. For the correct adjustment of the press proof you can either use the preset functions „Close Warm“ or „Close Cold“, or set the pressure manually using the „arrow up“ / „arrow down“ keys. Film or paper are often laminated with maximum pressure (manual setting). But also here the optimal pressure must be „tested“, in order to avoid wrinkles forming between adhesive film and paper.

- The machine is equipped with an automatic safety switch to prevent the roller pressure from being exceeded.
- In order to find out the optimum pressure, it is recommended to first carry out a test with a sample print.

To avoid tensions and jerks, the material to be processed should be centred, i.e. inserted with equal distance to both sides, even with smaller formats. When laminating, it is important that the laminate is adjusted to the image dimensions and does not protrude too far beyond the format, otherwise it will stick to the roller.

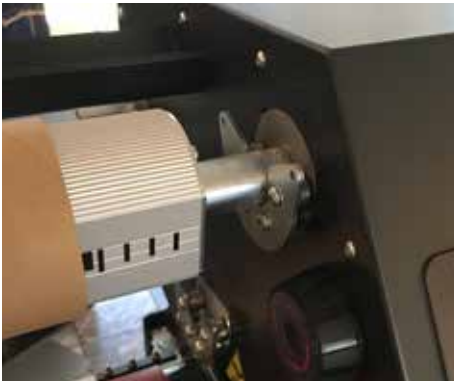
The difference in size between the laminate and the paper should be kept as small as possible (no more than 2 - 3 cm per side) to avoid wrinkles.



## Material guide

The material axes (R1 - R4) can carry both laminate with silicone paper and double-sided adhesive film. To insert the rolls, please refer to the following illustrations and descriptions.

### Assembly of the material axle



The driven axes are placed in the guide from above.



The drive pin is inserted into the guide of the axle.

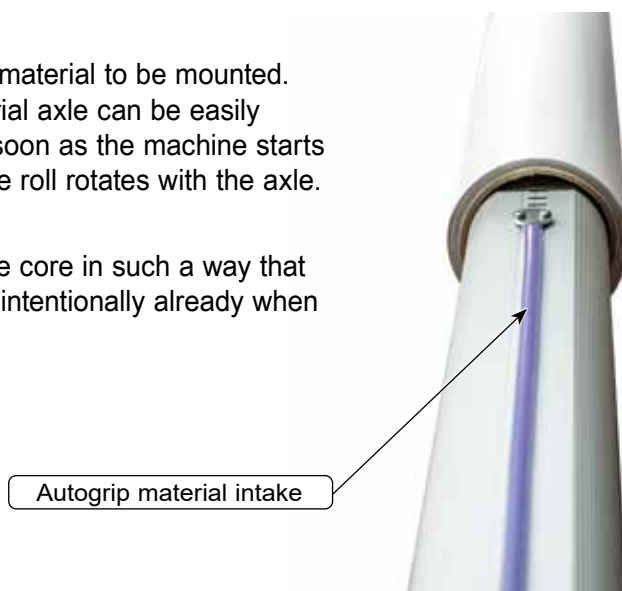


The front bottom axle (unwinding axle R1) and the rear axle (rewinding axle R2) are secured with a locking mechanism so that the axle remains securely in the holder.

### Autogrip material intake

Slide the material axle into the core of the roll of material to be mounted. Thanks to the Autogrip material holder, the material axle can be easily pushed into the roll core or pulled out again. As soon as the machine starts up, the Autogrip function locks in the core and the roll rotates with the axle.

We recommend pushing the material axle into the core in such a way that the locking rubber is on top and does not lock unintentionally already when pushing the axle into the core.



## The MediaTrim on the EASYLAM 160TW



The EASYLAM 160TW is optionally equipped with or without integrated MediaTrim (backside).

The function of the cross cutter is described [here](#).

The front is a laminator, the back is a MediaTrim. Of course you can use both functions separately. Here we show you how to use the MediaTrim.

### Pull up into working position

- The Mediatrim parks with its profile body underneath the laminating rollers and is pulled up by hand until it stops.



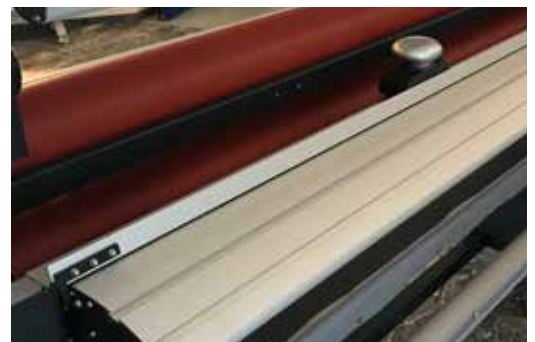
### Locking the profile body

- On the left and right in the frame of the laminator are two latches which fix the profile body at the top.



### Fold down cover profile

- Clamped on the crossbar behind the upper laminating roller the cover profile of the MediaTrim. Fold this profile down onto the profile body.



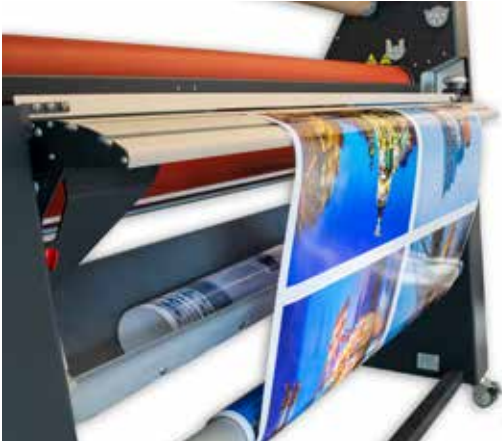
### Using MediaTrim

- Place the material to be cut between the cover profile and the profile body and press the cover profile down completely. Move the roller cutter from the parking station (left or right) onto the cover profile and guide the roller cutter to the other side with a smooth movement.



## Using MediaTrim for rolled-up prints

Follow the procedure described on page 9 and enable the MediaTrim.



- You can load prints or laminated prints on a roll into the rear reel seat or move them sheet by sheet.



- The rear edge of the MediaTrim is the cutting position of the roll knife.



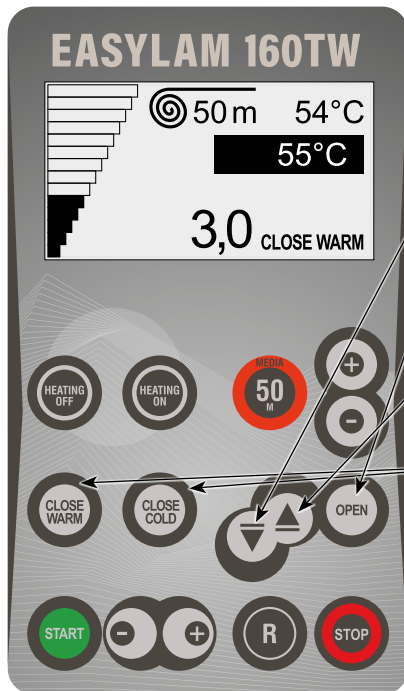
- Make sure that the cover profile is folded down firmly.



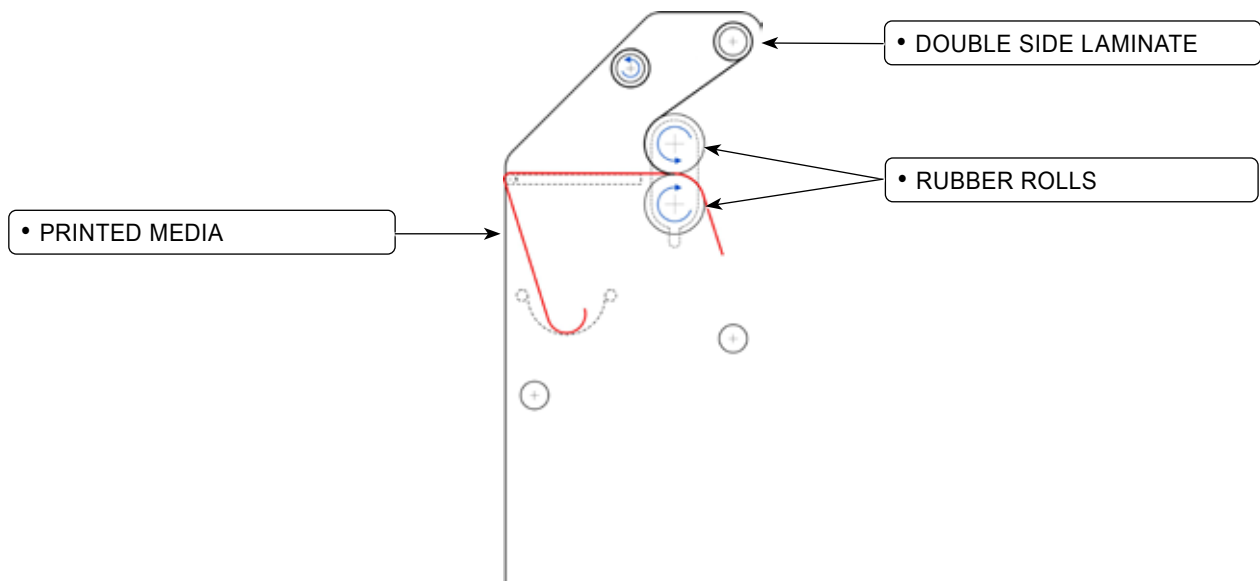
- Take the cutting head from the left or right parking position and drive the rolling knife over the material to be cut without stopping.

## Working process of the laminator

**Adhesives without protective liner (application tape, double-sided adhesive films) make one print self-adhesive:**



- Open the laminating rollers (see description on the keypad on page 5) by pressing the ▼ or „OPEN“ key and place the laminate in the machine as shown in the figure below. Make sure that the film lies completely smooth on the roller and that it does not have any wrinkles or waves. Secure the film by attaching it lightly to the rear work surface (tape).
- Close the roller opening by pressing the ▲ key at a distance of about 1 cm. In this phase, the film can become loose and may no longer adhere perfectly to the roller. Smooth the film again so that it is slightly stretched.
- After you have placed the print to be laminated under the upper laminating roller, close the rollers completely. Use the „CLOSE WARM“ or „CLOSE COLD“ button to close the rollers. If the print media is not stiff, place the laminate so that it extends over the rubber roller and the slot to the work surface so that it sticks when the machine starts up.



## Easylam-Cutter II

Special knives for the optimal equipment of our laminator with laminating films. There are various procedures for equipping our laminators with laminate. For easy and economical handling we recommend ours:

### Easylam-Cutter II. Item no.: 26441

This knife has a special blade.  
The risk of injury or damage to the roller of the laminator is considerably reduced.

### The advantages of the Easylam Cutter II:

- You save time and material by clamping the laminate including the carrier material (liner).
- No exposed knife tip.

The following description of the mode of operation enables an economical consumption of laminate when loading the laminator with the film. The preparation of the machine is simplified and can therefore be learned more quickly.

**You can obtain this tool from specialist dealers or at [www.dataplot.de](http://www.dataplot.de)**





## Procedure - Easylam-Cutter II

Place the laminate film including masking paper between the rollers



Hold the inserted laminate taut and close the rollers



Wind the laminate back tightly onto the laminate roll



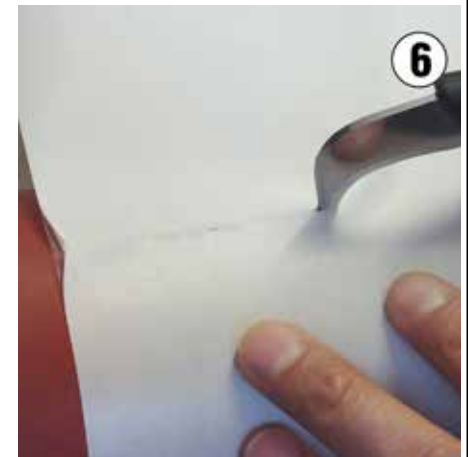
About 5 cm should protrude behind the rollers of the laminator



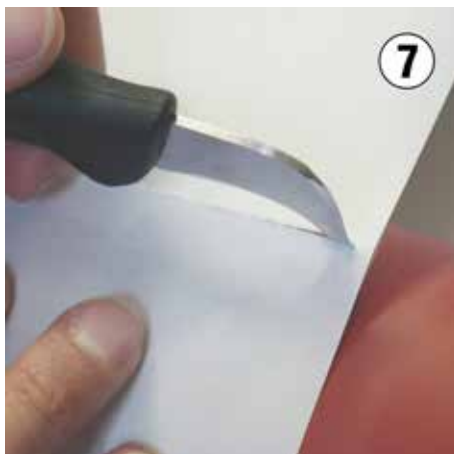
Position the blade of the Easylam-Cutter II between film and backing paper



Carefully separate the masking paper



Also use the blade in front



Fix the masking paper on the core for winding



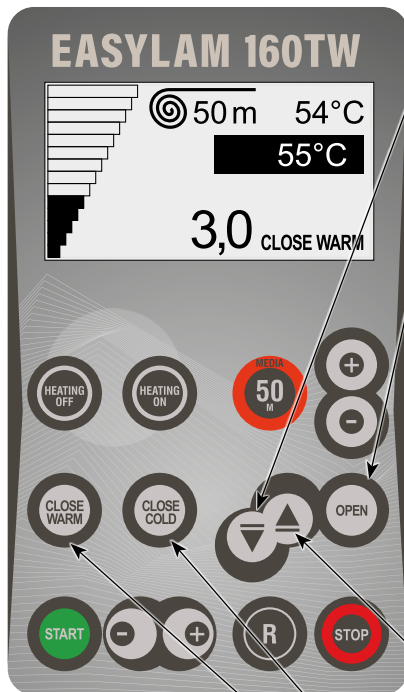
Start the laminating





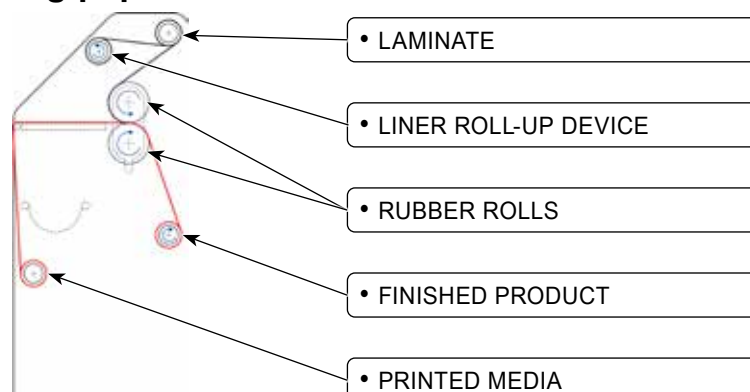
## Apply laminate with liner as protection and finishing to a print:

Over time, each user develops his or her own preferred method of loading a laminator. We describe our proposal to you:



- Open the lamination rollers by pressing the key ▼ or „OPEN“. (Fig. p. 5) and load the laminate as shown in the figure. Slide an empty roll core onto the rewind axle R3 (fig. p. 3 no. 6) so that the protective liner/cover paper can be wound up.
- After you have placed the laminate on the unwinding axle R4 (fig. p. 4 no. 8 ) cut off the masking paper and attach it to the core of the rewind axle. Attach it with adhesive tape on the cardboard core, on the rewind axle R3 (Fig. p. 3 no. 6). Make sure that the protective liner is even and is fastened without diagonal folds. Pull the laminate between the rollers (fig. p. 3) and stick it on with tape to the upper roller. Make sure that the film is evenly spread across the entire width. If folds or should slight waves occur, repeat the steps until the material is perfectly positioned.
- By adjusting the coupling of the rewind axles (fig. p. 3 no. 4) the tension of the axles R3 can be adjusted. A small force is required to roll up the liner. It is therefore recommended not to set this value too high.
- The required braking force is normally only low, unless the protective liner has a significantly greater thickness than the film, in which case the tractive force should be increased accordingly.
- Move the upper roller to about 1 cm from the lower roller by pressing the ▲ key. During this phase, the laminate may become loose and no longer adhere properly to the roller. Tension the laminate again.
- Place the print to be laminated between the laminating rollers as shown in the figure and close the rollers completely via ▲ or ▼ or use the „CLOSE WARM“ or „CLOSE COLD“ key to close the rollers.
- Loosen the film that you have fixed with tape on the upper roller and put the machine into operation.

## Laminating with masking paper from roll to roll



## Lamination of prints on plate

There are various techniques that professional users practice:

- Laminating a print onto a self-adhesive plate
- Lamination of a self-adhesive print on plate

### The general rule is:

- Open the lamination rollers at the height you need for the panel.
- Adjust the feed plate to the height of the panel.
- Slide the plate between the laminating rollers and close the rollers with the „**CLOSE**“ button.
- Remove the plate with the „**REVERSE**“ function.
- Now the passage height is set.

## Laminating a print onto a self-adhesive plate



- Pull off 3 - 4 cm from the cover paper of the plate and fix the print on the plate by hand.



- Start the laminating process by sliding the plate between the laminating rollers and pressing the **START** button.



- Slide the plate between the lamination rollers and place the print over the roller



- Remove the backing paper from the plate by hand during the lamination process.

## Lamination of a self-adhesive print on plate

- Pull 3 - 4 cm of cover paper from the self-adhesive print and stick the print to the plate. Slide the plate between the laminating rollers and place the print over the roller as shown in the graphic.



- Start the laminating process by sliding the plate between the laminating rollers and pressing the **START** button.



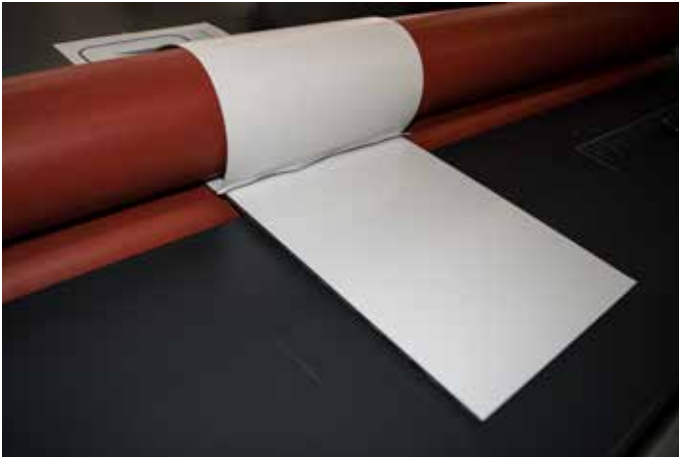
- Remove the backing paper from the plate by hand during the lamination process.



## Alternative technology:

- Place the self-adhesive print on the plate.





- Slide both between the lamination rollers until the middle of the print and place the print over the roller as shown in the graphic.



- Close the laminating rollers to secure the print and plate. The print should be longer than the plate.



- Separate the first half of the backing paper from the self-adhesive print and start the lamination process.



- Insert the panel again to laminate the second half.



## Application of APP film (or paper) on film plots



- The intake directly above the upper lamination roller can be used to place a roll of APP film directly onto the upper lamination roller.



- Pull the APP film between the laminating rollers and apply the film with the laminator to weeded film plots.



- Feed the weeded plot between the lamination rollers and apply the APP film by starting the lamination machine.



## CE Certificate of Conformity

**We, DATAPLOT GmbH**  
**Gutenbergstraße 15**  
**24558 Henstedt-Ulzburg**

**Manufacturers of the brand name EMBLEM, declare under general responsibility that the machine:**

|                        |                            |
|------------------------|----------------------------|
| <b>Trademark name:</b> | <b>EMBLEM</b>              |
| <b>Model:</b>          | <b>Easylam Expert 80C</b>  |
|                        | <b>Easylam Expert 140C</b> |
|                        | <b>Easylam Expert 160C</b> |
|                        | <b>Easylam 140C</b>        |
|                        | <b>Easylam 160C</b>        |
|                        | <b>Easylam 160W</b>        |
|                        | <b>Easylam 160TW</b>       |

**is in conformity with:**

**The requirements of the EU Directive 2006/42/EC.**  
**The requirements of the EU Directive 2014/30/EU.**  
**The requirements of the EU Directive 2014/35/EC.**



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